

CHAPTER 21  
LICENSURE REGULATIONS FOR SCHOOL PERSONNEL

Part I  
Definitions

8VAC20-21-10. Definitions.

The following words and terms, when used in this chapter, shall have the meanings indicated unless the context clearly implies otherwise:

"Accredited institution" means an institution of higher education accredited by a regional accrediting agency recognized by the United States Department of Education.

"Alternative route to licensure" means one route to licensure available to individuals employed by a Virginia educational agency who meet the guidelines specified in 8VAC20-21-80.

"Approved program" means a professional education program recognized as meeting state standards for the content and operation of such programs so graduates of the program will be eligible for state licensure. The Board of Education has the authority to approve programs in Virginia.

"Cancellation" means the annulment, voiding, or invalidation of a teaching license following voluntary surrender of the license by the license holder.

"Collegiate Professional License" means a five-year, renewable license available to an individual who has satisfied all requirements for licensure, including the professional teacher's assessment prescribed by the Board of Education.

"Competency" means a capability or skill that a person possesses and can demonstrate, given the appropriate resources and conditions. As used in this chapter, a competency refers to a behavior that a licensure candidate should be able to demonstrate prior to being issued a teaching license. In most cases, entry level proficiency relative to the competency is specified rather than desired mastery level proficiency.

"Content area course work" means courses at the undergraduate level (i.e., two-year or four-year institution) or at the graduate level that will not duplicate previous courses taken in the humanities, history and social science, the sciences, mathematics, health and physical education, and the fine arts. These courses are usually available through the college or department of arts or sciences.

"Denial" means the refusal to grant a teaching license to a new applicant or to an applicant who is reapplying after the expiration of a license.

"Division Superintendent License" means a five-year, renewable license available to an individual who has completed an earned master's degree from an accredited institution of higher education and meets the requirements specified in 8VAC20-21-590. The individual's name must be listed on the Board of Education's list of eligible division superintendents.

**"Eligibility License"** means a one-year license dated July 1-June 30. The "eligibility license" is issued upon successful completion of level I of the career switcher program. This license requires a bachelor's degree from a regionally accredited institution; the completion of teaching area requirements for an endorsement in a content area as set forth in the Board of Education's licensure requirements outlined in the publication, *Licensure Regulations for School Personnel*, July 1, 1998, or the equivalent through verifiable experience or academic study; and Virginia qualifying scores on Praxis I (Reading, Writing, and Mathematics) and Praxis II (subject area assessments). If the "eligibility license" expires prior to the individual receiving employment in Virginia, the license holder must reapply for the second "eligibility license." The intensive program (level I) must be repeated if the individual has not gained employment prior to the expiration of the second "eligibility license."

"Postgraduate Professional License" means a five-year, renewable license available to an individual who has qualified for the Collegiate Professional License and who holds an appropriate earned graduate degree from an accredited institution.

"Provisional License" means a nonrenewable license issued for a period of three years to individuals who have been employed by a Virginia educational agency and meet the requirements specified in 8VAC20-21-50 A 4.

"Pupil Personnel Services License" means a five-year, renewable license available to an individual who has earned an appropriate graduate degree from an accredited institution with an endorsement for guidance counselor, school psychologist, school social worker, or visiting teacher. This license does not require teaching experience.

"Reciprocity" means an agreement between two or more states that will recognize and accept one another's regulations and laws for privileges for mutual benefit. See 8VAC20-21-90 for conditions for teacher licensure by reciprocity.

"Revocation" means the annulment by recalling, repealing, or rescinding a teaching license.

"Special Education Conditional License" means a three-year, nonrenewable teaching license issued to an individual employed as a special education teacher in a public school or a nonpublic special education school in Virginia who does not hold the appropriate special education endorsement but meets the criteria specified in 8VAC20-21-50 A 5. This conditional license is not applicable to individuals employed as speech pathologists.

"Suspension" means the temporary withdrawal of a teaching license.

"Technical Professional License" means a five-year, renewable license available to a person who has graduated from an accredited high school (or possesses a General Education Development Certificate); has exhibited academic proficiency, technical competency, and occupational experience; and meets the requirements specified in 8VAC20-21-50 A 3.

## Part II Administering the Regulations

8VAC20-21-20. Administering the regulations.

A. In administering this chapter, modifications may be made in exceptional cases by the Superintendent of Public Instruction. Proposed modifications shall be made in writing to the Superintendent of Public Instruction, Commonwealth of Virginia, Virginia Department of Education, P.O. Box 2120, Richmond, Virginia 23218-2120.

B. Universities or colleges of education may propose modifications to this chapter to the Superintendent of Public Instruction. Requests for modifications shall be submitted in writing. Proposals shall include at least the following information: (i) philosophy/rationale for the proposed modification; (ii) requirements of the program including academic and professional studies; (iii) program competencies; (iv) program evaluation; and (v) faculty assigned to the program. Proposals received by the Superintendent of Public Instruction will be presented to the Advisory Board on Teacher Education and Licensure for review and formulation of a recommendation to the Board of Education.

## Part III Licensure

8VAC20-21-30. Purpose and responsibility for licensure.

The primary purpose for licensing teachers and other school personnel is to maintain standards of professional competence. The responsibility for licensure is set forth in §22.1-298 of the Code of Virginia, which states that the Board of Education shall prescribe by regulation the requirements for licensure of teachers.

8VAC20-21-40. Conditions for licensure.

A. Applicants for licensure must:

1. Be at least 18 years of age;

2. Pay the appropriate fees as determined by the Board of Education and complete the application process;
3. Have earned a baccalaureate degree (with the exception of the Technical Professional License) from an accredited institution of higher education with a Board of Education approved teacher education program; and
4. Possess good moral character (free of conditions outlined in Part VII (8VAC20-21-660 et seq.) of this chapter).

B. All candidates who hold at least a bachelor's degree and who seek an initial Virginia teaching license must obtain passing scores on a professional teacher's assessment prescribed by the Board of Education. Candidates seeking a Technical Professional License or the Pupil Personnel Services License are not required to take the professional teacher's assessment. Individuals who have completed a minimum of two years of full-time, successful teaching experience in an accredited public or nonpublic school (kindergarten through grade 12) in a state other than Virginia are exempted from the assessment requirement.

8VAC20-21-50. Types of licenses; dating of licenses.

A. The following types of licenses are available:

1. Collegiate Professional License. The Collegiate Professional License is a five-year, renewable license available to an individual who has satisfied all requirements for licensure, including the professional teacher's assessment prescribed by the Board of Education.
2. Postgraduate Professional License. The Postgraduate Professional License is a five-year, renewable license available to an individual who has qualified for the Collegiate Professional License and who holds an appropriate earned graduate degree from an accredited institution.
3. Technical Professional License. The Technical Professional License is a five-year, renewable license available to a person who has graduated from an accredited high school (or possesses a General Education Development Certificate); has exhibited academic proficiency, technical competency, and occupational experience; and has completed nine semester hours of specialized professional studies credit from an accredited college or university. The nine semester hours of professional studies course work must include human growth and development (three semester hours), curriculum and instructional procedures (three semester hours), and applications of instructional technology or foundations of education (three semester hours). The Technical Professional License is issued at the recommendation of an employing educational agency in the areas of vocational education, educational technology, and military science. In addition to demonstrating competency in the endorsement area sought, the individual must:

- a. Hold a license issued by the appropriate Virginia board for those program areas requiring a license and a minimum of two years of satisfactory experience at the journeyman level or an equivalent;
- b. Have completed a registered apprenticeship program and two years of satisfactory experience at the journeyman level or an equivalent level in the trade; or
- c. Have four years of work experience at the management or supervisory level or equivalent or have a combination of four years of training and work experience at the management or supervisory level or equivalent.

Individuals holding the Technical Professional License who seek the Collegiate Professional or Postgraduate Professional License must meet the professional teacher's assessment requirement.

4. Provisional License. The Provisional License is a three-year, nonrenewable license available to individuals who are employed by a Virginia educational agency and are:

- a. Entering the teaching field through the alternative route to licensure upon recommendation of the employing educational agency;
- b. Failing to meet an allowable portion of general, professional, or specific endorsement requirements;
- c. Seeking the Technical Professional License; or
- d. Eligible for licensure but need to complete successfully the professional teacher's assessment prescribed by the Board of Education.

5. Special Education Conditional License. A Special Education Conditional License is a three-year, nonrenewable teaching license issued to an individual employed as a special education teacher in a public school or a nonpublic special education school in Virginia who does not hold the appropriate special education endorsement. The conditional license is not applicable to individuals employed as speech pathologists. To be issued the Special Education Conditional License an individual must:

- a. Be employed by a Virginia public or nonpublic school and have the recommendation of the employing educational agency;
- b. Hold a baccalaureate degree from an accredited college or university;
- c. Have an assigned mentor endorsed in special education; and

d. Have a planned program of study in the assigned endorsement area and have completed a minimum of six semester hours in the core competencies of characteristics of students with disabilities and legal aspects associated with students with disabilities.

During the three years the Special Education Conditional License is valid, the individual must complete all requirements for the special education endorsement area, complete professional studies requirements, and meet Virginia's professional teacher's assessment requirement prescribed by the Board of Education.

6. Pupil Personnel Services License. The Pupil Personnel Services License is a five-year, renewable license available to an individual who has earned an appropriate graduate degree from an accredited institution with an endorsement for guidance counselor, school psychologist, school social worker, or visiting teacher. This license does not require teaching experience.

7. Division Superintendent License. The Division Superintendent License is a five-year, renewable license available to an individual who has completed an earned master's degree from an accredited institution of higher education and meets the requirements specified in 8VAC20-21-590. The individual's name must be listed on the Board of Education's list of eligible division superintendents.

8. “Eligibility License” means a one-year license dated July 1-June 30. The “eligibility license” is issued upon successful completion of level I of the career switcher program. This license requires a bachelor’s degree from a regionally accredited institution; the completion of teaching area requirements for an endorsement in a content area as set forth in the Board of Education’s licensure requirements outlined in the publication, *Licensure Regulations for School Personnel*, July 1, 1998, or the equivalent through verifiable experience or academic study; and Virginia qualifying scores on Praxis I (Reading, Writing, and Mathematics) and Praxis II (subject area assessments). If the “eligibility license” expires prior to the individual receiving employment in Virginia, the license holder must reapply for the second “eligibility license.” The intensive program (level I) must be repeated if the individual has not gained employment prior to the expiration of the second “eligibility license.”

B. All licenses will be effective from July 1 in the school year in which the application is made.

8VAC20-21-60. Additional endorsements.

One or more endorsements may be added to a license provided specific endorsement requirements have been met. Written requests may be made by the licensed professional and should be directed to the employing educational agency or college or university. If the request is not acted upon by the local educational agency or college or university within 30 days or is disputed, the license holder may make a written request for an additional endorsement directly to the Office of Professional Licensure, Virginia

Department of Education. Written requests should be submitted by January 15 to be in effect by July 1 of the same year.

8VAC20-21-70. Deletion of an endorsement.

An endorsement may be deleted from a license at the request of the licensed professional. Written requests are made by the licensed professional and should be directed to the employing educational agency. If the request is not acted upon by the local educational agency within 30 days, or is disputed, the license holder may make a written request for the deletion of an endorsement directly to the Office of Professional Licensure, Virginia Department of Education. Written requests should be submitted by January 15 to be in effect of July 1 of that year. Individuals who wish to add an endorsement that has been deleted must meet requirements for that endorsement at the time it is requested.

8VAC20-21-80. Alternative route to licensure.

A. "Career Switcher" Alternative Route to Licensure for Military Personnel

An alternative route is available to military personnel career switchers who seek teaching endorsements pre-K through grade 12, with the exception of special education.

1. An individual seeking an "eligibility license" must meet the following requirements: an application process; a bachelor's degree from a regionally accredited institution; the completion of teaching area requirements for an endorsement in a content area as set forth in the Board of Education's licensure requirements outlined in the publication, *Licensure Regulations for School Personnel*, July 1, 1998, or the equivalent through verifiable experience or academic study; and Virginia qualifying scores on Praxis I (Reading, Writing, and Mathematics) and Praxis II (subject area assessments). The "eligibility license" is awarded at the end of Level I preparation. All components of the career switcher alternative route for military personnel must be completed by the candidates.

2. The professional studies requirements must be completed during the course of a single year through the following three levels of preparation that may be offered through a variety of delivery systems. Preparation programs must be approved by the Virginia Department of Education:

a. Intensive Level I Preparation Phase includes, but is not limited to, the following:

- (1) Introduction to Classroom Management;
- (2) Introduction to the Standards of Learning;
- (3) Introduction to Teaching Strategies; and
- (4) Field Experience with Summer School Students.

b. Level II Preparation During First Year of Employment

- (1) Candidate seeks employment with the one-year "eligibility license";

- (2) Continued Level II preparation during the first year of employment; and
- (3) One year of successful, full-time teaching experience in an accredited public or nonpublic school under the newly-created one-year “eligibility license.” A trained mentor must be assigned to assist the candidate through the alternative route.

c . Step 4: Level III Preparation Continued

- (1) Post preparation (if needed);
- (2) Recommendation from employer for a renewable license; and
- (3) Issuance of the five-year renewal license.

3. Verification of program completion will be documented by the program provider and the superintendent, or designee.

4. Delivery systems of the career switcher for the alternative route to licensure must adhere to requirements specified by the Board of Education when proposals are requested. The programs must include the prescribed scope and sequence of preparation as well as evaluation of the candidate and overall program evaluation. These programs must be approved by the Department of Education.

**A B.** An alternative route is available to individuals employed by an educational agency who seek teaching endorsements pre-K through grade 12.

1. An individual seeking a Provisional License through the alternative route must meet the requirements specified in 8VAC20-21-50 A 4.

2. The professional studies requirements for the appropriate level of endorsement sought must be completed. A Virginia educational agency may submit to the Superintendent of Public Instruction for approval an alternative program to meet the professional studies requirements. The alternative program must include training (seminar, internship, course work, etc.) in human growth and development, curriculum and instructional procedures (including technology), foundations of education, and reading.

3. One year of successful, full-time teaching experience in the appropriate teaching area in an accredited public or nonpublic school must be completed. A fully-licensed experienced teacher must be available in the school building to assist the beginning teacher employed through the alternative route.

**B. C.** Alternative programs developed by institutions of higher education (i) recognize the unique strengths of prospective teachers from nontraditional backgrounds and (ii) prepare these individuals to meet the same standards that are established for others who are granted a provisional license.

8VAC20-21-90. Conditions for licensure by reciprocity.

An individual coming into Virginia from any state may qualify for a Virginia teaching license with comparable endorsement areas if the individual has completed a state-approved teacher training program through a regionally accredited four-year college or university, or if the individual holds a valid out-of-state teaching license which must be in force at the time the application for a Virginia license is made. An individual seeking licensure must establish a file in the Department of Education by submitting a complete application packet, which includes official student transcripts. A professional teacher's assessment prescribed by the Board of Education must be satisfied.

8VAC20-21-100. Requirements for renewing a license.

A. The Division Superintendent, Postgraduate Professional, Collegiate Professional, Technical Professional, and Pupil Personnel Services Licenses may be renewed upon the completion of 180 professional development points within a five-year validity period based on an individualized professional development plan. Professional development points can be accrued by the completion of activities from one or more of the following options: college credit, professional conference, peer observation, educational travel, curriculum development, publication of article, publication of book, mentorship/supervision, educational project, and employing educational agency professional development activity.

B. A minimum of 90 points (three semester hours in a content area) in the license holder's endorsement area or areas shall be required of license holders without a master's degree and may be satisfied at the undergraduate (two-year or four-year institution) or graduate level. Special education course work designed to assist classroom teachers and other school personnel in working with students with disabilities, a course in gifted education, a course in educational technology, or a course in English as a second language may be completed to satisfy the content course requirement for one cycle of the renewal process. Professional development activities designed to support the Virginia Standards of Learning, Standards of Accreditation, and Assessments may be accepted in lieu of the content course for one renewal cycle. The substance of the activities must clearly support these initiatives and address one or more of the following areas: (i) new content knowledge to implement the Virginia Standards of Learning; (ii) curriculum development initiative designed to translate the standards from standards to classroom objectives; (iii) teaching beginning reading skills including phonemic awareness and the structure of language (phonics); (iv) staff development activities in assessment to assist classroom teachers in the utilization of test results to improve classroom instruction; and (v) professional development designed to implement the technology standards in the schools. Technical Professional License holders without baccalaureate degrees may satisfy the requirement through vocational education workshops, vocational education institutes, or through undergraduate course work at two-year or four-year institutions.

C. Content area courses are courses at the undergraduate level (two-year or four-year institution) or at the graduate level that will not duplicate previous courses taken in the humanities, history and social science, the sciences, mathematics, health and physical

education, and the fine arts. These courses are usually available through the college or department of arts and sciences. License holders with elementary education, middle education, special education, or reading endorsements must satisfy the 90-point requirement through content course work in one of the areas listed above. Courses available through the college's or institution's department of education may be used to satisfy the content requirement for those license holders with endorsements in health and physical education, vocational education, and library science education.

D. With prior approval of the division superintendent, the 90 points in a content area also may be satisfied through course work taken to obtain a new teaching endorsement or course work taken because of a particular need of a particular teacher.

E. The remaining 90 points may be accrued by activities drawn from one or more of the 10 options described in The Virginia Renewal Manual. Renewal work is designed to provide licensed personnel with opportunities for professional development relative to the grade levels or teaching fields to which they are assigned or for which they seek an added endorsement. Such professional development encompasses (i) responsible remediation of any area of an individual's knowledge or skills that fails to meet the standards of competency and (ii) responsible efforts to increase the individual's knowledge of new developments in his field and to respond to new curricular demands within the person's area of professional competence.

F. The proposed work toward renewal in certain options must be approved in advance by the chief executive officer or designee of the employing educational agency. Persons who are not employed by an educational agency may renew or reinstate their license by submitting to the Office of Professional Licensure, Department of Education, their individualized renewal record and verification of points, including official student transcripts of course work taken at an accredited two-year or four-year college or university.

G. Accrual of professional development points shall be determined by criteria set forth by the Virginia Department of Education.

H. Virginia school divisions and nonpublic schools will recommend renewal of licenses using the renewal point system.

#### Part IV

#### Licensure Regulations Governing Early/Primary Education, Elementary Education and Middle Education Endorsements

8VAC20-21-110. Early/primary education, elementary education, and middle education endorsements.

Individuals seeking licensure with endorsements in early/primary education, elementary education, and middle education may meet requirements through the completion of an approved program or, if employed by a Virginia public or nonpublic school, through the alternative route to licensure. Components of the licensure program include a degree in the liberal arts and sciences (or equivalent), professional teacher's assessment requirement prescribed by the Board of Education, specific endorsement requirements, and professional studies requirements.

8VAC20-21-120. Professional studies requirements.

Professional studies requirements for early/primary education, elementary education, and middle education: 18 semester hours.

1. Human growth and development (birth through adolescence): 3 semester hours. Skills in this area shall contribute to an understanding of the physical, social, emotional, and intellectual development of children and the ability to use this understanding in guiding learning experiences. The interaction of children with individual differences --economic, social, racial, ethnic, religious, physical, and mental --should be incorporated to include skills contributing to an understanding of developmental disabilities and developmental issues related to but not limited to attention deficit disorders, substance abuse, child abuse, and family disruptions.

2. Curriculum and instructional procedures: 6 semester hours.

a. Early/primary education preK-3 or elementary education preK-6 curriculum and instructional procedures. Skills in this area shall contribute to an understanding of the principles of learning; the application of skills in discipline-specific methodology; communication processes; classroom management; selection and use of materials, including media and computers; and evaluation of pupil performance. The teaching methods, including for gifted and talented students and those students with disabling conditions, must be appropriate for the level of endorsement (preK-3 or preK-6). Pre-student teaching experiences (field experiences) should be evident within these skills.

b. Middle education 6-8 curriculum and instructional procedures. Skills in this area shall contribute to an understanding of the principles of learning; the application of skills in discipline-specific methodology; communication processes, classroom management; selection and use of materials, including media and computers; and evaluation of pupil performance. The teaching methods, including for gifted and talented students and students with disabling conditions, must be appropriate for the middle education endorsement. Pre-student teaching experiences (field experiences) should be evident within these skills.

3. Foundations of education: 3 semester hours. Skills in this area shall be designed to develop an understanding of the historical, philosophical, and sociological foundations underlying the role, development and organization of public education in the United States. Attention should be given to the legal status of teachers and students, including

federal and state laws and regulations, school as an organization/culture, and contemporary issues in education.

4. Reading: 6 semester hours

a. Early/primary preK-3 and elementary education preK-6 --language acquisition and reading: 6 semester hours. Skills in this area shall be designed to impart a thorough understanding of the complex nature of language acquisition and reading, to include: phonemic awareness, an understanding of sound/symbol relationships, explicit phonics instruction, syllables, phonemes, morphemes, decoding skills, word attack skills, and a knowledge of how phonics, syntax, and semantics interact. Additional skills shall include proficiency in a wide variety of comprehension strategies, as well as the ability to foster appreciation of a variety of literature and independent reading.

b. Middle education --language acquisition: 3 semester hours and reading in the content areas: 3 semester hours. Skills in this area shall be designed to impart an understanding of comprehension skills in all content areas, including a repertoire of questioning strategies, summarizing and retelling skills, and strategies in literal, interpretive, critical, and evaluative comprehension, as well as the ability to foster appreciation of a variety of literature and independent reading.

5. Supervised classroom experience. The student teaching experience should provide for the prospective teacher to be in classrooms full time for a minimum of 300 clock hours with at least half of that time spent supervised in direct teaching activities (providing direct instruction) at the level of endorsement. One year of successful full-time teaching experience in the endorsement area in any accredited public or nonpublic school may be accepted in lieu of the supervised teaching experience. A fully licensed, experienced teacher must be available in the school building to assist a beginning teacher employed through the alternative route.

8VAC20-21-130. Early/primary education preK-3.

A. The program for early/primary education preK-3 will ensure that the candidate has demonstrated the following competencies:

1. Methods.

a. Understanding of the knowledge, skills, and processes to support learners in achievement of the Virginia Standards of Learning in English, mathematics, history and social science, science, and computer/technology;

b. The ability to integrate language and literacy, mathematics, science, health, social studies, art, music, drama, movement, and technology in learning experiences;

c. The use of differentiated instruction and flexible groupings to meet the needs of learners at different stages of development, abilities, and achievement;

d. The use of appropriate methods, including direct instruction, to help learners develop knowledge and basic skills, sustain intellectual curiosity, and problem solve;

e. The ability to utilize effective classroom management skills through methods that will build responsibility and self-discipline and maintain a positive learning environment;

f. The ability to modify and manage learning environments and experiences to meet the individual needs of children, including children with disabilities, gifted children, and children with limited proficiency in English;

g. The ability to use formal and informal assessments to diagnose needs, plan and modify instruction, and record student progress;

h. A commitment to professional growth and development through reflection, collaboration, and continuous learning;

i. The ability to analyze, evaluate, apply, and conduct quantitative and qualitative research; and

j. The ability to use technology as a tool for teaching, learning, research, and communication.

## 2. Knowledge and skills.

a. Reading/English. Understanding of the content, knowledge, skills, and processes for teaching the Virginia Standards of Learning for English including: reading, writing, literature, oral language (speaking and listening), and research and how these standards provide the core for teaching English in grades preK-3 (early/primary licensure).

(1) Assessment and diagnostic teaching. The individual must:

(a) Be proficient in the use of assessment and screening measures (formal and informal) for language proficiency, concepts of print, phoneme awareness, letter recognition, sound-symbol knowledge, single word recognition, decoding, word attack skills, word recognition in context, reading fluency, and oral and silent reading comprehension; and

(b) Be proficient in the ability to use diagnostic data to tailor instruction, accelerate, and remediate, using flexible skill-level groupings as necessary.

(2) Oral communication. The individual must:

(a) Be proficient in the knowledge, skills, and processes necessary for teaching oral language (including speaking and listening);

(b) Be proficient in developing students' phonemic awareness/phonological association skills;

(c) Demonstrate effective strategies for facilitating the learning of standard English by speakers of other languages and dialects;

(d) Demonstrate an understanding of the unique needs of students with language differences and delays; and

(e) Demonstrate the ability to promote creative thinking and expression, as through storytelling, drama, choral/oral reading, etc.

(3) Reading/literature. The individual must:

(a) Demonstrate an understanding of the role of the family in developing literacy;

(b) Demonstrate the ability to appreciate the written word and the awareness of the printed language and writing system;

(c) Develop an understanding of the linguistic, sociological, cultural, cognitive, and psychological basis of the reading process;

(d) Be proficient in explicit phonics instruction, including an understanding of sound/symbol relationships, syllables, phonemes, morphemes, decoding skills, and word attack skills;

(e) Be proficient in the use of the cuing systems of language, including knowledge of how phonics, syntax, and semantics interact as the reader constructs meaning;

(f) Be proficient in strategies to increase vocabulary;

(g) Be proficient in the structure of the English language, including an understanding of syntax and vocabulary development;

(h) Be proficient in reading comprehension strategies, including a repertoire of questioning strategies, understanding the dimensions of word meanings, teaching summarizing and retelling skills, and guiding students to make connections beyond the text;

(i) Be proficient in the ability to teach strategies in literal, interpretive, critical, and evaluative comprehension;

(j) Demonstrate the ability to develop comprehension skills in all content areas;

(k) Demonstrate the ability to foster the appreciation of a variety of literature; and

(l) Understand the importance of promoting independent reading and reading reflectively by selecting quality literature, including fiction and nonfiction, at appropriate reading levels.

(4) Writing. The individual must:

(a) Be proficient in the knowledge, skills, and processes necessary for teaching writing, including grammar, punctuation, spelling, syntax, etc.;

(b) Be proficient in systematic spelling instruction, including awareness of the purpose and limitations of "invented spelling," the connection between stages of language acquisition and spelling, orthographic patterns, and strategies for promoting generalization of spelling study to writing; and

(c) Demonstrate the ability to promote creative thinking and expression, as through imaginative writing, etc.

(5) Research. The individual must demonstrate the ability to guide students in their use of technology for both process and product as they work with reading, writing, and research.

b. Mathematics.

(1) Understanding of the mathematics relevant to the content identified in the Virginia Standards of Learning and how the standards provide the foundation for teaching mathematics in grades preK-3. Experiences with practical applications and the use of appropriate technology and manipulatives should be used within the following content:

(a) Number systems, their structure, basic operations, and properties;

(b) Elementary number theory, ratio, proportion and percent;

(c) Algebra: operations with monomials and polynomials; algebraic fractions; linear and quadratic equations and inequalities, linear systems of equations and inequalities; radicals and exponents; arithmetic and geometric sequences and series; algebraic and trigonometric functions; and transformations among graphical, tabular, and symbolic form of functions;

(d) Geometry: geometric figures, their properties, relationships, Pythagorean Theorem; deductive and inductive reasoning; perimeter, area, and surface area of 2- and 3-dimensional figures; coordinate and transformational geometry; and constructions;

(e) Probability and statistics: permutations and combinations; experimental and theoretical probability; prediction; graphical representations including box-and-whisker plots; measures of central tendency, range, and normal distribution; and

(f) Computer science: terminology, simple programming, and software applications.

(2) Understanding of the nature of mathematics and how the study of the discipline helps students appreciate:

- (a) The sequential nature of mathematics;
- (b) The multiple representations of mathematical concepts and procedures;
- (c) The ways to reason mathematically, solve problems, and communicate mathematics effectively at different levels of formality;
- (d) The contributions of different cultures toward its development;
- (e) The role of mathematics and its applications in culture and society; and
- (f) The way changes in technology have influenced mathematics education.

c. History and social science.

(1) Understanding of the knowledge, skills, and processes of history and the social science disciplines as defined in the Virginia Standards of Learning and how the standards provide the necessary foundation for teaching history and social science, including in:

- (a) History.
  - (i) The contributions of ancient civilizations to American social and political institutions;
  - (ii) Major events in Virginia history from 1607 to the present;
  - (iii) Key individuals, documents, and events in the American revolution;
  - (iv) The evolution of American's constitutional republic, its ideas, institutions, and practices;
  - (v) The influence of religious traditions on American heritage and contemporary American society;
  - (vi) The changing role of America around the world; relations between domestic affairs and foreign policy; global political and economic interactions; and
  - (vii) The origins, effects, aftermath, and significance of the two world wars, the Korean and Vietnam conflicts and the Post Cold War Era.

(b) Geography.

(i) The use of maps and other geographic representations, tools, and technologies to acquire, process, and report information;

(ii) The relationship between human activity and the physical environment in the community and the world;

(iii) Physical processes that shape the surface of the earth; and

(iv) How political forces influence the division and control of the earth's resources.

(c) Civics/economics.

(i) The privileges and responsibilities of good citizenship and the importance of the rule of law for the protection of individual rights;

(ii) The process of making laws in the United States and the fundamental ideals and principles of a republican form of government;

(iii) The nature and purposes of constitutions and alternative ways of organizing constitutional governments; and

(iv) The structure of the United States economy compared to other economies.

(2) Understanding of the nature of history and the social sciences, and how the study of the disciplines assists students in developing critical thinking skills in helping them to understand:

(a) The relationship between past and present;

(b) The use of primary sources such as: artifacts, letters, photographs, and newspapers;

(c) How events in history are shaped both by the ideas and actions of people;

(d) Diverse cultures and shared humanity;

(e) Civic participation in a pluralistic democracy; and

(f) The relationship between history, literature, art, and music.

d. Science.

(1) Understanding of the knowledge, skills, and processes of the Earth, life, and physical sciences as defined in the Virginia Science Standards of Learning and how these standards provide a sound foundation for teaching science in the elementary grades.

(2) Understanding of the nature of science and scientific inquiry, including:

(a) The role of science in explaining and predicting events and phenomena; and

(b) The science skills of data analysis, measurement, observation, prediction, and experimentation.

(3) Understanding of the knowledge, skills, and processes for an active elementary science program, including the ability to:

(a) Design instruction reflecting the goals of the Virginia Science Standards of Learning;

(b) Conduct research projects and experiments in a safe environment;

(c) Organize key science content into meaningful units of instruction;

(d) Adapt instruction to diverse learners using a variety of techniques;

(e) Evaluate instructional materials, instruction, and student achievement; and

(f) Incorporate instructional technology to enhance student performance in science.

(4) Understanding of the content, processes, and skills of the Earth sciences, biology, chemistry, and physics supporting the teaching of elementary school science as defined by the Virginia Science Standards of Learning and equivalent to academic course work in each of these core science areas.

(5) Understanding of the core scientific disciplines to ensure:

(a) The ability to teach the processes and organizing concepts common to the natural and physical sciences; and

(b) Student achievement in science.

(6) Understanding of the contributions and significance of science, including:

(a) Its social and cultural significance;

(b) The relationship of science to technology; and

(c) The historical development of scientific concepts and scientific reasoning.

3. Child and family.

a. Knowledge and understanding of human growth and development from birth through adolescence and the link between child development and instruction;

- b. The ability to understand children in the context of family, culture, and community;
- c. The ability to establish positive and collaborative relationships with all families as partners in teaching and learning;
- d. The ability to support families in character development through emphasis on respect, responsibility, and moral behavior; and
- e. The ability to support students by cooperatively working with parents and other professionals.

B. Endorsement requirements.

- 1. The candidate must have graduated from an approved teacher preparation program in early/primary education preK-3; or
- 2. The candidate for the early/primary education preK-3 endorsement must have a degree in the liberal arts and sciences (or equivalent) and completed course work which covers the early/primary education preK-3 competencies and fulfills the following 51-semester-hour requirements:
  - a. English (must include composition, oral communication, and literature): 12 semester hours;
  - b. Mathematics: 9 semester hours;
  - c. Science (including a laboratory course): 9 semester hours;
  - d. History (must include American history and world history): 6 semester hours;
  - e. Social science (must include geography and economics): 6 semester hours;
  - f. Arts and humanities: 6 semester hours; and
  - g. Computer/technology: 3 semester hours.

8VAC20-21-140. Elementary education preK-6.

A. The program in elementary education preK-6 will ensure that the candidate has demonstrated the following competencies:

- 1. Methods.

- a. Understanding of the needed knowledge, skills, and processes to support learners in achievement of the Virginia Standards of Learning in English, mathematics, history and social science, science, and computer/technology;
- b. The ability to integrate language and literacy, mathematics, science, health, social studies, art, music, drama, movement, and technology in learning experiences;
- c. The use of differentiated instruction and flexible groupings to meet the needs of learners at different stages of development, abilities, and achievement;
- d. The use of appropriate methods, including direct instruction, to help learners develop knowledge and basic skills, sustain intellectual curiosity, and problem solve;
- e. The ability to utilize effective classroom management skills through methods that will build responsibility and self-discipline and maintain a positive learning environment;
- f. The ability to modify and manage learning environments and experiences to meet the individual needs of children, including children with disabilities, gifted children, and children with limited proficiency in English;
- g. The ability to use formal and informal assessments to diagnose needs, plan and modify instruction, and record student progress;
- h. A commitment to professional growth and development through reflection, collaboration, and continuous learning;
- i. The ability to analyze, evaluate, apply, and conduct quantitative and qualitative research; and
- j. The ability to use technology as a tool for teaching, learning, research, and communication.

## 2. Knowledge and skills.

a. Reading/English. Understanding of the content, knowledge, skills, and processes for teaching the Virginia Standards of Learning for English including: reading, writing, literature, oral language (speaking and listening), and research and how these standards provide the core for teaching English in grades preK-6 (elementary licensure).

(1) Assessment and diagnostic teaching. The individual must:

(a) Be proficient in the use of assessment and screening measures (formal and informal) for language proficiency, concepts of print, phoneme awareness, letter recognition, sound-symbol knowledge, single word recognition, decoding, word attack skills, word recognition in context, reading fluency, and oral and silent reading comprehension; and

(b) Be proficient in the ability to use diagnostic data to tailor instruction, accelerate, and remediate, using flexible skill-level groupings as necessary.

(2) Oral communication. The individual must:

(a) Be proficient in the knowledge, skills, and processes necessary for teaching oral language (including speaking and listening);

(b) Be proficient in developing students' phonemic awareness/phonological association skills;

(c) Demonstrate effective strategies for facilitating the learning of standard English by speakers of other languages and dialects;

(d) Demonstrate an understanding of the unique needs of students with language differences and delays; and

(e) Demonstrate the ability to promote creative thinking and expression, as through storytelling, drama, choral/oral reading, etc.

(3) Reading/literature. The individual must:

(a) Demonstrate an understanding of the role of the family in developing literacy;

(b) Demonstrate the ability to create appreciation of the written word and the awareness of the printed language and writing system;

(c) Develop an understanding of the linguistic, sociological, cultural, cognitive, and psychological basis of the reading process;

(d) Be proficient in explicit phonics instruction, including an understanding of sound/symbol relationships, syllables, phonemes, morphemes, decoding skills, and word attack skills;

(e) Be proficient in the use of the cuing systems of language, including knowledge of how phonics, syntax, and semantics interact as the reader constructs meaning;

(f) Be proficient in strategies to increase vocabulary;

(g) Be proficient in the structure of the English language, including an understanding of syntax and vocabulary development;

(h) Be proficient in reading comprehension strategies, including a repertoire of questioning strategies, understanding the dimensions of word meanings, teaching summarizing and retelling skills, and guiding students to make connections beyond the text; and

(i) Be proficient in the ability to teach strategies in literal, interpretive, critical, and evaluative comprehension.

(j) Demonstrate the ability to develop comprehension skills in all content areas;

(k) Demonstrate the ability to foster appreciation of a variety of literature; and

(l) Understand the importance of promoting independent reading and reading reflectively by selecting quality literature, including fiction and non-fiction, at appropriate reading levels.

(4) Writing. The individual must:

(a) Be proficient in the knowledge, skills, and processes necessary for teaching writing, including grammar, punctuation, spelling, syntax, etc.;

(b) Be proficient in systematic spelling instruction, including awareness of the purpose and limitations of "invented spelling," the connection between stages of language acquisition and spelling, orthographic patterns, and strategies for promoting generalization of spelling study to writing; and

(c) Demonstrate the ability to promote creative thinking and expression, as through imaginative writing, etc.

(5) Research. The individual must demonstrate the ability to guide students in their use of technology for both process and product as they work with reading, writing, and research.

b. Mathematics.

(1) Understanding of the mathematics relevant to the content identified in the Virginia Standards of Learning and how the standards provide the foundation for teaching mathematics in grades preK-6. Experiences with practical applications and the use of appropriate technology and manipulatives should be used within the following content:

(a) Number systems, their structure, basic operations, and properties;

(b) Elementary number theory, ratio, proportion and percent;

(c) Algebra: operations with monomials and polynomials; algebraic fractions; linear and quadratic equations and inequalities, linear systems of equations and inequalities; radicals and exponents; arithmetic and geometric sequences and series; algebraic and trigonometric functions; and transformations among graphical, tabular, and symbolic form of functions;

(d) Geometry: geometric figures, their properties, relationships, Pythagorean Theorem; deductive and inductive reasoning; perimeter, area, and surface area of 2- and 3-dimensional figures; coordinate and transformational geometry; and constructions;

(e) Probability and statistics: permutations and combinations; experimental and theoretical probability; prediction; graphical representations, including box-and-whisker plots; measures of central tendency, range, and normal distribution; and

(f) Computer science: terminology, simple programming, and software applications.

(2) Understanding of the nature of mathematics and how the study of the discipline helps students appreciate:

(a) The sequential nature of mathematics;

(b) The multiple representations of mathematical concepts and procedures;

(c) The ways to reason mathematically, solve problems, and communicate mathematics effectively at different levels of formality;

(d) The contributions of different cultures toward its development;

(e) The role of mathematics and its applications in culture and society; and

(f) The way changes in technology have influenced mathematics education.

c. History and social science.

(1) Understanding of the knowledge, skills, and processes of history and the social science disciplines as defined in the Virginia Standards of Learning and how the standards provide the necessary foundation for teaching history and social science, including in:

(a) History

(i) The contributions of ancient civilizations to American social and political institutions;

(ii) Major events in Virginia history from 1607 to the present;

(iii) Key individuals, documents, and events in the American revolution;

(iv) The evolution of America's constitutional republic, its ideas, institutions, and practices;

(v) The influence of religious traditions on American heritage and contemporary American society;

(vi) The changing role of America around the world; relations between domestic affairs and foreign policy; global political and economic interactions; and

(vii) The origins, effects, aftermath, and significance of the two world wars, the Korean and Vietnam conflicts, and the Post Cold War Era.

(b) Geography.

(i) The use of maps and other geographic representations, tools, and technologies to acquire, process, and report information;

(ii) The relationship between human activity and the physical environment in the community and the world;

(iii) Physical processes that shape the surface of the earth; and

(iv) How political forces influence the division and control of the earth's resources.

(c) Civics/economics.

(i) The privileges and responsibilities of good citizenship and the importance of the Rule of Law for the protection of individual rights;

(ii) The process of making laws in the United States and the fundamental ideals and principles of a republican form of government;

(iii) The nature and purposes of constitutions and alternative ways of organizing constitutional governments; and

(iv) The structure of the United States economy compared to other economies.

(2) Understanding of the nature of history and social sciences and how the study of the disciplines assists students in developing critical thinking skills in helping them to understand:

(a) The relationship between past and present;

(b) The use of primary sources such as: artifacts, letters, photographs, and newspapers;

(c) How events in history are shaped both by the ideas and actions of people;

(d) Diverse cultures and shared humanity;

(e) Civic participation in a pluralistic democracy; and

(f) The relationship between history, literature, art, and music.

d. Science.

- (1) Understanding of the knowledge, skills, and processes of the Earth, life, and physical sciences as defined in the Virginia Science Standards of Learning and how these standards provide a sound foundation for teaching science in the elementary grades;
- (2) Understanding of the nature of science and scientific inquiry, including:
  - (a) The role of science in explaining and predicting events and phenomena; and
  - (b) The science skills of data analysis, measurement, observation, prediction, and experimentation.
- (3) Understanding of the knowledge, skills, and processes for an active elementary science program including the ability to:
  - (a) Design instruction reflecting the goals of the Virginia Science Standards of Learning;
  - (b) Conduct research projects and experiments in a safe environment;
  - (c) Organize key science content into meaningful units of instruction;
  - (d) Adapt instruction to diverse learners using a variety of techniques;
  - (e) Evaluate instructional materials, instruction, and student achievement; and
  - (f) Incorporate instructional technology to enhance student performance in science.
- (4) Understanding of the content, processes, and skills of the Earth sciences, biology, chemistry, and physics supporting the teaching of elementary school science as defined by the Virginia Science Standards of Learning and equivalent course work reflecting each of these core science areas.
- (5) Understanding of the core scientific disciplines to ensure:
  - (a) The ability to teach the processes and organizing concepts common to the natural and physical sciences; and
  - (b) Student achievement in science.
- (6) Understanding of the contributions and significance of science including:
  - (a) Its social and cultural significance;
  - (b) The relationship of science to technology; and

(c) The historical development of scientific concepts and scientific reasoning.

3. Child and family.

- a. Knowledge and understanding of human growth and development from birth through adolescence and the link between child development and instruction;
- b. The ability to understand children in the context of family, culture, and community;
- c. The ability to establish positive and collaborative relationships with all families as partners in teaching and learning;
- d. The ability to support families in character development through emphasis on respect, responsibility, and moral behavior; and
- e. The ability to support students by cooperatively working with parents and other professionals.

B. Endorsement requirements.

1. The candidate shall have graduated from an approved teacher preparation program in elementary education preK-6; or
2. The candidate for the elementary education preK-6 endorsement must have a degree in the liberal arts and sciences (or equivalent) and completed course work which covers the elementary education preK-6 competencies and fulfills the following 60-semester-hour requirements:
  - a. English (must include composition, oral communication, and literature): 12 semester hours;
  - b. Mathematics: 12 semester hours;
  - c. Science (including a laboratory course): 12 semester hours;
  - d. History (must include American history and world history): 9 semester hours;
  - e. Social science (must include geography and economics): 6 semester hours;
  - f. Arts and humanities: 6 semester hours; and
  - g. Computer/technology: 3 semester hours.

8VAC20-21-150. Middle education 6-8.

A. The program in middle education 6-8 with two areas of concentration will ensure that the candidate has demonstrated the following competencies:

1. Methods.

a. Understanding of the needed knowledge, skills, and processes to support learners in achievement of the Virginia Standards of Learning for grades 6-8;

b. The use of appropriate methods, including direct instruction, to help learners develop knowledge and skills, sustain intellectual curiosity, and solve problems;

c. The ability to plan and teach collaboratively to facilitate interdisciplinary learning;

d. The use of differentiated instruction and flexible groupings to meet the needs of preadolescents at different stages of development, abilities, and achievement;

e. The ability to utilize effective classroom management skills through methods that will build responsibility and self-discipline and maintain a positive learning environment;

f. The ability to modify and manage learning environments and experiences to meet the individual needs of preadolescents, including children with disabilities, gifted children, and children with limited proficiency in the English language;

g. The ability to use formal and informal assessments to diagnose needs, plan and modify instruction, and record student progress;

h. A commitment to professional growth and development through reflection, collaboration, and continuous learning;

i. The ability to analyze, evaluate, apply, and conduct quantitative and qualitative research;

j. The ability to use technology as a tool for teaching, learning, research, and communication;

k. An understanding of how to apply a variety of school organizational structures, schedules, groupings, and classroom formats appropriately for middle level learners; and

l. Skill in promoting the development of all students' abilities for academic achievement and continued learning.

2. English.

a. Possession of the skills necessary to teach the writing process, to differentiate among the forms of writing (creative, expository, persuasive, and technical), and to use computers and other available technology;

b. Understanding of and knowledge in grammar, usage, and mechanics and its integration in writing;

c. Understanding of the theory of linguistics and of the nature and development of language and its impact on vocabulary development and spelling;

d. Understanding of and knowledge in reading and comprehensive skills;

e. Understanding of and knowledge in speaking and listening; and

f. Knowledge of major works from British, American, world, and ethnic/minority literature appropriate for English instruction.

### 3. History and social science.

a. Understanding of the knowledge, skills, and processes of history and the social science disciplines as defined by the Virginia History and Social Science Standards of Learning and how the standards provide the foundation for teaching history and social science, including in:

#### (1) United States history.

(a) The evolution of the American constitutional republic and its ideas, institutions, and practices from the colonial period to the present; the American Revolution, including ideas and principles preserved in significant Virginia and United States historical documents as required by §22.1-201 of the Code of Virginia (Declaration of American Independence, the general principles of the Constitution of the United States, the Virginia Statute of Religious Freedom, the charters of April 10, 1606, May 23, 1609, and March 12, 1612, of The Virginia Company, and the Virginia Declaration of Rights), and historical challenges to the American political system (i.e., slavery, the Civil War, emancipation, and civil rights);

(b) The influence of religious traditions on the American heritage and on contemporary American society;

(c) The changing role of America around the world; the relationship between domestic affairs and foreign policy; global political and economic interactions;

(d) The influence of immigration on American political, social, and economic life;

(e) Origins, effects, aftermath and significance of the two world wars, the Korean and Vietnam conflicts, and the Post Cold War Era;

(f) Social, political, and economic transformations in American life during the 20th century; and

(g) Tensions between liberty and equality, liberty and order, region and nation, individualism and the common welfare, and between cultural diversity and civic unity.

(2) World history.

(a) The political, philosophical, and cultural legacies of ancient, American, Asian, African, and European civilizations;

(b) Origins, ideas, and institutions of Judaism, Christianity, Hinduism, Confucianism and Taoism, and Shinto, Buddhist and Islamic religious traditions;

(c) Medieval society and institutions; relations with Islam; feudalism and the evolution of representative government;

(d) The social, political, and economic contributions of selected civilizations in Africa, Asia, Europe, and the Americas;

(e) The culture and ideas of the Renaissance and the Reformation, European exploration, and the origins of capitalism and colonization;

(f) The cultural ideas of the Enlightenment and the intellectual revolution of the 17th and 18th centuries;

(g) The sources, results, and influence of the American and French revolutions;

(h) The social consequences of the Industrial Revolution and its impact on politics and culture;

(i) The global influence of European ideologies of the 19th and 20th centuries (liberalism, republicanism, social democracy, Marxism, nationalism, Communism, Fascism, and Nazism); and

(j) The origins, effects, aftermath and significance of the two world wars.

(3) Civics and economics.

(a) Essential characteristics of limited and unlimited governments;

(b) Importance of the Rule of Law for the protection of individual rights and the common good;

(c) Rights and responsibilities of American citizenship;

(d) Nature and purposes of constitutions and alternative ways of organizing constitutional governments;

- (e) American political culture;
  - (f) Values and principles of the American constitutional republic;
  - (g) Structures, functions, and powers of local, state, and national governments; and
  - (h) The structure and function of the United States market economy as compared with other economies.
- b. Understanding of the nature of history and social science and how the study of these disciplines helps students go beyond critical thinking skills to help them appreciate:
- (1) The significance of the past to their lives and to society;
  - (2) Diverse cultures and shared humanity;
  - (3) How things happen, how they change, and how human intervention matters;
  - (4) The interplay of change and continuity;
  - (5) Historical cause and effect;
  - (6) The importance of individuals who have made a difference in history and the significance of personal character to the future of society;
  - (7) The relationship among history, geography, civics, and economics; and
  - (8) The difference between fact and conjecture, evidence and assertion, and the importance of framing useful questions.
4. Mathematics.
- a. Understanding of the knowledge and skills necessary to teach the Virginia Mathematics Standards of Learning and how curriculum may be organized to teach these standards to diverse learners;
  - b. Understanding of a core knowledge base of concepts and procedures within the discipline of mathematics, including the following strands: number systems and number theory; geometry and measurement; statistics and probability; functions and algebra;
  - c. Understanding of the sequential nature of mathematics and the mathematical structures inherent in the content strands;

d. Understanding of and the ability to use the four processes --becoming mathematical problem solvers, reasoning mathematically, communicating mathematically, and making mathematical connections --at different levels of complexity;

e. Understanding of the history of mathematics, including the contributions of various individuals and cultures toward the development of mathematics, and the role of mathematics in culture and society;

f. Understanding of the major current curriculum studies and trends in mathematics;

g. Understanding of the role of technology and the ability to use graphing utilities and computers in the teaching and learning of mathematics;

h. Understanding of and the ability to select, adapt, evaluate and use instructional materials and resources, including professional journals and technology;

i. Understanding of and the ability to use strategies for managing, assessing, and monitoring student learning, including diagnosing student errors; and

j. Understanding of and the ability to use strategies to teach mathematics to diverse learners.

#### 5. Science.

a. Understanding of the knowledge, skills, and processes of the Earth, life, and physical sciences as defined in the Virginia Science Standards of Learning and how these provide a sound foundation for teaching science in the middle grades.

b. Understanding of the nature of science and scientific inquiry, including:

(1) Function of research design and experimentation;

(2) Role of science in explaining and predicting events and phenomena; and

(3) Science skills of data analysis, measurement, observation, prediction, and experimentation.

c. Understanding of the knowledge, skills, and processes for an active middle school science program, including the ability to:

(1) Design instruction reflecting the goals of the Virginia Science Standards of Learning;

(2) Conduct research projects and experiments;

(3) Implement safety rules/procedures and ensure that students take appropriate safety precautions;

- (4) Organize key science content into meaningful units of instruction;
- (5) Adapt instruction to diverse learners using a variety of techniques;
- (6) Evaluate instructional materials, instruction, and student achievement; and
- (7) Incorporate instructional technology to enhance student performance in science.

d. Understanding of the content, processes, and skills of the Earth sciences, biology, chemistry, and physics supporting the teaching of middle school science as defined by the Virginia Science Standards of Learning and equivalent to academic course work in each of these core science areas.

e. Understanding of the core scientific disciplines to ensure:

- (1) The placement of science in an appropriate interdisciplinary context;
- (2) The ability to teach the processes and organize concepts common to the natural and physical sciences; and
- (3) Student achievement in science.

f. Understanding of the contributions and significance of science to include:

- (1) Its social and cultural significance;
- (2) The relationship of science to technology; and
- (3) The historical development of scientific concepts and scientific reasoning.

6. Youth and family.

a. Knowledge and understanding of the physical, social, emotional, intellectual, and moral development of youth from preadolescence through early adolescence and the link between adolescent development and instruction;

b. The ability to understand children in the context of family, culture, and community;

c. The ability to establish positive and collaborative relationships with all families as partners in teaching and learning;

d. The ability to support families and youth in character development through emphasis on respect, responsibility, and moral behavior; and

e. The ability to support students by cooperatively working with parents and other professionals.

B. Endorsement requirements.

1. The candidate must have graduated from an approved teacher preparation discipline-specific program in middle education 6-8 with two areas of concentration from the areas of English, mathematics, science, and history/social science; or

2. An applicant seeking the middle education 6-8 endorsement must have earned a degree in the liberal arts and sciences (or equivalent); and completed a minimum of 21 semester hours in two areas of concentration which will be listed on the license; and completed minimum requirements for those areas (English, mathematics, science, and history/social science) in which the individual is not seeking an area of concentration. The applicant will be restricted to teaching only in those areas of concentration listed on the teaching license.

a. English.

(1) English concentration (must include course work in language, e.g., history, structure, grammar, literature, advanced composition, and interpersonal communication or speech): 21 semester hours.

(2) Individuals seeking endorsement in middle education 6-8 without an English concentration must have completed 12 semester hours in English.

b. Mathematics.

(1) Mathematics concentration (must include course work in algebra, geometry, probability and statistics, and applications of mathematics): 21 semester hours.

(2) Individuals seeking endorsement in middle education 6-8 without a mathematics concentration must have completed a minimum of 6 semester hours in mathematics for a total of 15 semester hours in mathematics and science.

c. Science.

(1) Science concentration (must include courses in each of the following: biology, chemistry, physics, and Earth and space science; a laboratory course is required in two of the four areas): 21 semester hours.

(2) Individuals seeking endorsement in middle education 6-8 without a science concentration must have completed a minimum of 6 semester hours in science for a total of 15 semester hours in mathematics and science.

d. History/social science.

(1) History/social science concentration (must include American history, world history, economics, geography, international affairs, and current events): 21 semester hours.

(2) Individuals seeking endorsement in middle education 6-8 without a history/social science concentration must have completed a minimum of 6 semester hours in history and a minimum of 6 semester hours in social science for a total of 15 semester hours in history and social science.

Part V

Licensure Regulations Governing PreK-12 Endorsements, Special Education,  
Secondary Grades 6-12 Endorsements, and Adult Education

8VAC20-21-160. PreK-12 endorsements, special education, secondary grades 6-12 endorsements, and adult education.

Individuals seeking licensure with preK-12 endorsements, special education, secondary grades 6-12 endorsements, or adult education may meet requirements through the completion of an approved program or, if employed by a Virginia public or nonpublic school, through the alternative route to licensure. Components of the licensure program include a degree in the liberal arts and sciences (or equivalent), professional teacher's assessment requirement prescribed by the Board of Education, specific endorsement requirements, and professional studies requirements.

Professional studies requirements for adult education, preK-12 endorsements, special education, and secondary grades 6-12 endorsements: 15 semester hours.

1. Human growth and development (birth through adolescence): 3 semester hours. Skills in this area shall contribute to an understanding of the physical, social, emotional, and intellectual development of children and the ability to use this understanding in guiding learning experiences. The interaction of children with individual differences --economic, social, racial, ethnic, religious, physical, and mental --should be incorporated to include skills contributing to an understanding of developmental disabilities and developmental issues related to but not limited to attention deficit disorders, substance abuse, child abuse, and family disruptions.

2. Curriculum and instructional procedures: 6 semester hours. Skills in this area shall contribute to an understanding of the principles of learning; the application of skills in discipline-specific methodology; communication processes; classroom management; selection and use of materials, including media and computers; and evaluation of pupil performance. Teaching methods appropriate for exceptional students, including gifted and talented and those with disabling conditions, and appropriate for the level of endorsement sought shall be included. Curriculum and instructional procedures for secondary grades 6-12 endorsements must include middle and secondary education. Pre-

student teaching experiences (field experiences) should be evident within these skills. For preK-12, field experiences must be at the elementary, middle, and secondary levels.

3. Foundations of education: 3 semester hours. Skills in this area shall be designed to develop an understanding of the historical, philosophical, and sociological foundations underlying the role, development and organization of public education in the United States. Attention should be given to the legal status of teachers and students, including federal and state laws and regulations, school as an organization/culture, and contemporary issues in education.

4. Reading.

a. Adult education, preK-12, and secondary grades 6-12 --reading in the content area: 3 semester hours. Skills in this area shall be designed to impart an understanding of comprehension skills in all content areas, including a repertoire of questioning strategies, summarizing and retelling skills, and strategies in literal, interpretive, critical, and evaluative comprehension, as well as the ability to foster appreciation of a variety of literature and independent reading.

b. Special education --language acquisition and reading: 6 semester hours. Skills in this area shall be designed to impart a thorough understanding of the complex nature of language acquisition and reading to include: phonemic awareness, an understanding of sound/symbol relationships, explicit phonics instruction, syllables, phonemes, morphemes, decoding skills, word attack skills, and a knowledge of how phonics, syntax, and semantics interact. Additional skills shall include proficiency in a wide variety of comprehension strategies, as well as the ability to foster appreciation of a variety of literature and independent reading.

5. Supervised classroom experience. The student teaching experience should provide for the prospective teacher to be in classrooms full time for a minimum of 300 clock hours with at least half of that time spent supervised in direct teaching activities (providing direct instruction) in the endorsement area sought. If a preK-12 endorsement is sought, teaching activities must be at the elementary and middle or secondary levels. Individuals seeking the endorsement in library media must complete the supervised experience in a school library media setting. Individuals seeking an endorsement in an area of special education must complete the supervised classroom experience requirement in the area of special education for which the endorsement is sought. One year of successful full-time teaching experience in the endorsement area in any accredited public or nonpublic school may be accepted in lieu of the supervised teaching experience. A fully licensed, experienced teacher must be available in the school building to assist a beginning teacher employed through the alternative route.

8VAC20-21-180. Adult education.

A. The program in adult education will ensure that the candidate has demonstrated the following competencies:

1. Understanding of the nature or psychology of the adult learner or adult development;
2. Understanding of the knowledge, skills, and processes needed for the selection, evaluation, and instructional applications of the methods and materials for adult basic skills including:
  - a. Curriculum development in adult basic education or GED instruction;
  - b. Beginning reading for adults;
  - c. Beginning mathematics for adults;
  - d. Reading comprehension for adult education;
  - e. Foundations of adult education; and
  - f. Other adult basic skills instruction.
3. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.
4. One semester of supervised successful full-time (or an equivalent number of hours of part-time experience) teaching of adults; and

B. Endorsement requirements. The candidate must have:

1. A baccalaureate degree from an accredited college or university or hold a Collegiate Professional License; and
2. A minimum of 15 semester hours in adult education that must include the competencies specified in subsection A of this section.

Individuals not holding a Collegiate Professional License must meet the professional teacher's assessment requirement prescribed by the Board of Education.

8VAC20-21-190. Adult English as a second language (add-on endorsement).

- A. The program in adult English as a second language will ensure that the candidate has demonstrated the following competencies:
1. Knowledge in the growth and development of the adult learner;
  2. Knowledge of teaching methods and materials in adult English as a second language;
  3. Knowledge in adult language acquisition;

4. Knowledge of assessment methods in adult English as a second language instruction;
5. Skills in teaching the adult learner;
6. Understanding of the effects of socio-cultural variables in the instructional setting;
7. Skills in teaching a variety of adult learning styles;
8. Proficiency in cross-cultural communication;
9. Proficiency in speaking, listening, and reading;
10. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

B. Endorsement requirements. The candidate must have:

1. Graduated from an approved teacher preparation program in adult English as a second language; or
2. A baccalaureate degree and an endorsement in any teaching area and completed 21 semester hours of course work distributed in the following areas:
  - a. Methods for teaching English as a second language to adults: 3 semester hours;
  - b. English linguistics: 3 semester hours;
  - c. Cross-cultural education: 3 semester hours;
  - d. Modern foreign language: 3 semester hours; and
  - e. Electives from the following areas: 6 semester hours
    - (1) Cross-cultural communication;
    - (2) Second language acquisition;
    - (3) General linguistics;
    - (4) Teaching reading to adults;
    - (5) Adult English as a second language instruction;
    - (6) Adult English as a second language curriculum development.

8VAC20-21-200. Art preK-12.

A. The program in art preK-12 will ensure that the candidate has demonstrated the following competencies:

1. Understanding of the knowledge, skills, and processes of the art discipline as defined in the Virginia Standards of Learning, and how they provide a necessary foundation for teaching art;
2. Understanding of the knowledge, skills, and processes for teaching art appropriate to the developmental levels of students in preK-12 including the following areas:
  - a. Knowledge and experience in planning, developing, administering, and evaluating a program of art education;
  - b. Two-dimensional media and concepts: basic and complex techniques and concepts in two-dimensional design, drawing, painting, printmaking, computer graphics and other electronic imagery;
  - c. Three-dimensional media and concepts: basic and complex techniques and concepts in three-dimensional design, sculpture, ceramics, fiber arts, and crafts;
  - d. History of art, including aesthetics and criticism;
  - e. The relationship of art and culture and the influence of art on past and present cultures;
  - f. Related areas of art, such as architecture, dance, music, theater, photography, and other expressive arts;
  - g. Knowledge and understanding of technological and artistic copyright laws;
  - h. Knowledge and understanding of safety, including use of toxic art material in various aspects of studio and classroom work; and
  - i. Observation and student teaching experiences at the elementary, middle and secondary levels.
3. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

B. Endorsement requirements. The candidate must have:

1. Graduated from an approved teacher preparation program in art; or
2. Completed a major in art or 36 semester hours in art with course distribution in the following areas:

- a. Two-dimensional media: 12 semester hours;
- b. Three-dimensional media: 12 semester hours;
- c. History of art, aesthetics, and criticism: 9 semester hours; and
- d. Related areas of art: 3 semester hours.

8VAC20-21-210. Computer science.

A. The program in computer science will ensure that the candidate has demonstrated the following competencies:

- 1. Understanding of mathematical principles that are the basis of many computer applications;
- 2. Knowledge of structured program and algorithm design, and data structures;
- 3. Knowledge of programming and evaluating programs in at least two widely-used, high-level, structured programming languages;
- 4. Knowledge of programming languages including definition, structure, and comparison;
- 5. Knowledge of the functions, capabilities, and limitations of computers;
- 6. Knowledge of mainframe, minicomputer, and microcomputer systems and their applications;
- 7. An ability to use currently available software for word processing, calculation/spreadsheet, database management, and communications; and
- 8. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

B. Endorsement requirements. The candidate must have:

- 1. Graduated from an approved teacher preparation program in computer science; or
- 2. Completed 36 semester hours of course work to include each of the following areas:
  - a. Mathematics;
  - b. Statistics;
  - c. Data structures and algorithm analysis;

- d. Introduction to computer systems;
- e. Application of computer technology; and
- f. Programming.

C. Add-on endorsement requirements in computer science. The candidate must have:

- 1. A baccalaureate degree and an endorsement in any teaching area; and
- 2. Completed 18 semester hours of course work to include each of the following areas:
  - a. Data structures and algorithm analysis;
  - b. Programming;
  - c. Introduction to computer systems;
  - d. Application of computer technology; and
  - e. Computer science.

8VAC20-21-220. Dance.

A. The program in dance will ensure that the candidate has demonstrated the following competencies:

- 1. Understanding of the knowledge, skills, and processes of the dance discipline and how they provide a foundation needed to teach dance;
- 2. Understanding of the knowledge, skills, and processes for teaching dance to meet the developmental levels of students in preK-12, including the following:
  - a. Knowledge of and experience in planning, developing, administering, and evaluating a program of dance education;
  - b. Ballet, folk, jazz, and modern dance with an area of concentration in one of these areas;
  - c. Scientific foundations, including human anatomy, kinesiology, and injury prevention and care for dance;
  - d. The relationship of dance and culture and the influence of dance on past and present cultures, including history of dance; and

e. Related areas of dance, such as art, music, and theater.

3. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

B. Endorsement requirements. The candidate must have:

1. Graduated from an approved teacher preparation program in dance; or

2. Completed 24 semester hours with course distribution in the following areas:

a. Development of movement language: 9 semester hours.

(1) A course in each area --ballet, folk, jazz, and modern dance: 6 semester hours; and

(2) Area of concentration in one area --ballet, folk, jazz, or modern dance beyond the entry level: 3 semester hours;

b. Composition, improvisation, and dance production (may include stage lighting, stage costuming, or stage makeup): 3 semester hours;

c. Scientific foundations, including human anatomy, kinesiology, and injury prevention and care for dance: 9 semester hours; and

d. Cultural understanding, including history of dance: 3 semester hours.

C. Add-on endorsement requirements in dance. The candidate must have:

1. A baccalaureate degree and an endorsement in any teaching area; and

2. Completed 15 semester hours of course work in the following areas:

a. Development of movement language: 9 semester hours.

(1) A course in each area --ballet, folk, jazz, and modern: 6 semester hours; and

(2) Area of concentration in one area --ballet, folk, jazz, or modern beyond the entry level: 3 semester hours;

b. Composition, improvisation, and dance production (may include stage lighting, stage costuming, or stage makeup): 3 semester hours; and

c. Cultural understanding, including history of dance: 3 semester hours.

8VAC20-21-230. Driver education (add-on endorsement).

A. The program in driver education will ensure that the candidate has demonstrated the following competencies:

1. Basic understanding of the administration of a driver education program including:
  - a. Coordination and scheduling of classroom and in-car instruction;
  - b. Skill and content knowledge assessment;
  - c. Student safety and other legal issues;
  - d. The juvenile and standard licensing processes;
  - e. Compulsory attendance and other licensing related statutes; and
  - f. Vehicle procurement, identification and equipment requirements; and instructional technology.
2. Basic content knowledge needed to understand and teach classroom and in-car driver education including:
  - a. Traffic laws;
  - b. Signs, signals, pavement markings, and right-of-way rules;
  - c. Basic driving and vehicle control skills;
  - d. Interaction with other highway users (pedestrians, animals, motorcycles, bicycles, trucks, buses, trains, trailers, motor homes, ATVs, and other recreational users);
  - e. Time/space and risk management;
  - f. Alcohol and other drugs and driving;
  - g. Passive and active restraint systems;
  - h. Vehicle maintenance;
  - i. Legal responsibilities of owning and operating a motor vehicle;
  - j. Behavioral aspects of crash prevention;
  - k. Natural laws and driving;
  - l. Adverse driving conditions and handling emergencies; and

m. Planning a safe trip.

3. Basic content knowledge needed to understand and teach the driver education laboratory phase including:

a. Simulation;

b. Multiple-vehicle range;

c. Prescribed route planning;

d. Basic and evasive maneuvers;

e. Manual transmission; and

f. Administration of the driver's license road skills examination and procedure for licensing students with disabilities.

4. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

B. Endorsement requirements. The candidate must have:

1. Completed an approved teacher preparation program in driver education; or

2. Completed 6 semester hours of course work distributed in the following areas:

a. Foundations of traffic safety: 3 semester hours; and

b. Principles and methodologies of classroom and in-car instruction, including a minimum of 20 hours of actual behind-the-wheel supervised teaching experience: 3 semester hours.

8VAC20-21-240. English.

A. The program in English will ensure that the candidate has demonstrated the following competencies:

1. Understanding of the knowledge, skills, and processes of English as defined in the Virginia Standards of Learning;

2. Skills necessary to teach the writing process and the different forms of writing (creative, expository, persuasive, and technical) and to employ available computer/technology;

3. Knowledge of grammar, usage, and mechanics and their integration in writing;

4. Understanding of the theory of linguistics and of the nature and development of language and their impact on vocabulary development and spelling;
5. Knowledge of reading and comprehensive skills, including technical reading skills;
6. Knowledge of speaking and listening skills;
7. Knowledge of major works from British, American, world, and ethnic/minority literature appropriate for English instruction; and
8. The ability to provide experiences in communication arts, such as journalism, dramatics, debate, forensics, radio, television, films and other media.

B. Endorsement requirements. The candidate must have:

1. Graduated from an approved teacher preparation program in English; or
2. Completed a major in English or a minimum of 36 semester hours of course work distributed in the following areas:
  - a. Literature: 12 semester hours. Courses must include:
    - (1) Survey of British literature;
    - (2) Survey of American literature;
    - (3) World literature; and
    - (4) Literary theory/criticism.
  - b. Language: 6 semester hours. Experiences shall include:
    - (1) The development and nature of the English language, including some attention to comparative English grammar; and
    - (2) A grammar course integrating grammar and writing.
  - c. Composition: 6 semester hours. Experiences shall include:
    - (1) The teaching of writing, based on current knowledge and most effective practices, including the use of technology for this purpose; and
    - (2) An advanced composition course --expository and technical writing.

d. Oral language: 3 semester hours. Experiences shall include the teaching of oral language in groups, as well as attention to oral language as used in both formal and informal presentations.

e. Electives from the areas listed above: 9 semester hours.

8VAC20-21-250. English as a second language preK-12.

A. The program in English as a second language will ensure that the candidate has demonstrated the following competencies:

1. Knowledge of general linguistics and English linguistics;
2. Skills in elementary and secondary teaching methods and student assessment for English as a second language;
3. Skills in the teaching of reading;
4. Knowledge of the effects of socio-cultural variables in the instructional setting;
5. Proficiency in spoken and written English;
6. Knowledge of another language and its structure; and
7. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

B. Endorsement requirements. The candidate must have:

1. Graduated from an approved teacher preparation program in English as a second language; or
2. Completed 24 semester hours of course work distributed in the following areas:
  - a. Teaching of reading: 3 semester hours;
  - b. English linguistics (including phonology, morphology, syntax of English): 3 semester hours;
  - c. Cross-cultural education: 3 semester hours;
  - d. Modern foreign languages (if an applicant's primary language is other than English, all 6 hours must be in English): 6 semester hours;

e. Electives in second language acquisition, general linguistics, applied linguistics, psycholinguistics, sociolinguistics, ESL assessment, or ESL curriculum development: 6 semester hours; and

f. Methods of teaching English as a second language at the elementary and secondary levels: 3 semester hours.

8VAC20-21-260. Foreign language preK-12.

A. The specific language of the endorsement will be noted on the license.

B. Foreign language preK-12 --languages other than Latin.

1. The program in the foreign language will ensure that the candidate has:

a. demonstrated the following competencies:

(1) Understanding of authentic speech at a normal tempo;

(2) Ability to speak with a command of vocabulary, pronunciation, and syntax adequate for expressing thoughts to a native speaker not used to dealing with foreigners;

(3) Ability to read and comprehend authentic texts of average difficulty and of mature content;

(4) Ability to write a variety of texts including description and narration with clarity and correctness in vocabulary and syntax;

(5) Knowledge of geography, history, social structure and artistic and literary contributions of the target societies;

(6) Ability to interpret contemporary lifestyles, customs, and cultural patterns of the target societies;

(7) Understanding of the application of basic concepts of phonology, syntax, and morphology to the teaching of the foreign language;

(8) Knowledge of the national standards for foreign language learning, current proficiency-based objectives of the teaching of foreign languages at the elementary and secondary levels, elementary and secondary methods and techniques for attaining these objectives, the assessment of foreign language skills, the use of media in teaching languages, current curricular developments, the relationship of language study to other areas of the curriculum, and the professional literature of foreign language teaching; and

(9) Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing; and

b. Participated in opportunities for significant foreign language study or living experiences in this country or abroad, or both.

2. Endorsement requirements. The candidate must have:

a. Graduated from an approved teacher preparation program in a foreign language; or

b. Completed 30 semester hours above the intermediate level in the foreign language. (Endorsement in a second language may be obtained with 24 semester hours of course work above the intermediate level.) The program shall include (i) courses in advanced grammar and composition, conversation, culture and civilization, and literature and (ii) a minimum of 3 semester hours of methods of teaching foreign languages at the elementary and secondary levels; or

c. Native speakers or candidates who have learned a foreign language without formal academic credit in a college or university must complete the following requirements:

(1) Achieved a minimum score of 600 on the Test of English as a Foreign Language, if English is not the native language. Native speakers of English are exempt from this test;

(2) Achieved a composite score at or above the 50th percentile on the listening, speaking, reading, writing, civilization and culture sections of the Modern Language Association Proficiency Test for Teachers and Advanced Students. No individual section score shall be below the 25th percentile; and

(3) Earned a minimum of 3 semester hours of methods of teaching foreign languages at the elementary and secondary levels from an accredited college or university in the United States.

C. Foreign language preK-12 --Latin.

1. The program in Latin will ensure that the candidate has demonstrated the following competencies:

a. Ability to read and comprehend Latin in the original;

b. Ability to pronounce Latin with consistent classical (or ecclesiastical) pronunciation;

c. Knowledge of the vocabulary, phonetics, morphology and syntax of Latin and the etymological impact of Latin;

d. Ability to discuss the culture and civilization of Greco-Roman society, including history, daily life, art, architecture, and geography;

e. Ability to explain the relationship of Greco-Roman culture and civilization to subsequent cultures and civilizations;

f. Knowledge of major literary masterpieces and their relationship to the historical and social context of the society;

g. Competency in (i) current methodologies for teaching Latin at the elementary and secondary levels; (ii) lesson planning, scope and sequencing of material, instructional strategies and assessment under the guidance of an experienced Latin teacher; and

h. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

2. Endorsement requirements. The candidate must have:

a. Graduated from an approved teacher preparation program in Latin; or

b. Completed 24 semester hours of Latin above the intermediate level. Up to six hours of Roman history, Roman life, mythology, or archaeology may be included in the total hours and 3 semester hours of methods of teaching Latin at the elementary and secondary levels are required.

8VAC20-21-270. Gifted education (add-on endorsement).

A. The program in gifted education will ensure that the candidate has demonstrated the following competencies:

1. Understanding of principles of the integration of gifted education and general education, including:

a. Strategies to encourage the interaction of gifted students with students of similar and differing abilities; and

b. Development of activities to encourage parental and community involvement in the education of the gifted, including the establishment and maintenance of an effective advisory committee.

2. Understanding of the characteristics of gifted students, including:

a. Varied expressions of advanced aptitudes, skills, creativity, and conceptual understandings;

b. Methodologies that respond to the affective (social-emotional) needs of gifted students; and

- c. Gifted behaviors in special populations students (i.e., those who are culturally diverse, low income, or physically disabled).
3. Understanding of specific techniques to identify gifted students using diagnostic and prescriptive approaches to assessment, including:
    - a. Multiple assessment instruments and identification strategies through a review of portfolios or performance, or both;
    - b. The use of rating scales, checklists, and questionnaires by parents, teachers and others;
    - c. The evaluation of data collected from student records such as grades, honors, and awards; and
    - d. The use of case study reports providing information concerning exceptional conditions.
  4. Understanding of educational models, teaching methods, and strategies for selecting materials and resources that ensure:
    - a. Academic rigor through the development of high-level proficiency in all core academic areas utilizing the Virginia Standards of Learning as a baseline;
    - b. The acquisition of knowledge and development of products reflective of creative and critical thinking as applied to learning both in and out of the classroom; and
    - c. The development of learning environments which guide students to become self-directed, independent learners.
  5. Understanding of theory and principles of differentiating curriculum designed to match the distinct characteristics of gifted learners, including:
    - a. The integration of multiple disciplines into an area of study;
    - b. Emphasis on in-depth learning, independent and self-directed study skills;
    - c. The development of analytical, organizational, critical, and creative thinking skills;
    - d. The development of sophisticated products using varied modes of expression;
    - e. The evaluation of student learning through appropriate and specific criteria; and
    - f. The development of advanced technological skills to enhance student performance.
  6. Understanding of contemporary issues and research in gifted education, including:

a. The systematic gathering, analyzing, and reporting of formative and summative data;  
and

b. Current local, state, and national issues and concerns.

7. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

8. The program will include a practicum which shall include a minimum of 45 instructional hours of successful teaching experiences with gifted students in a heterogeneously grouped (mixed ability) classroom or a homogeneously grouped (single ability) classroom.

B. Endorsement requirements.

1. The candidate must have completed an approved teacher preparation program in gifted education; or

2. The candidate must have:

a. Graduated with a baccalaureate degree with an endorsement in any teaching area;

b. Completed 12 hours of graduate-level course work in gifted education; and

c. Completed a practicum of at least 45 instructional hours pursuant to subdivision A 8 of this section. One year of successful, full-time teaching experience in an accredited public or nonpublic school may be accepted in lieu of the practicum. A mentor holding a valid license with an endorsement in gifted education must be assigned to the teacher.

8VAC20-21-280. Health and physical education preK-12.0

A. The program in health and physical education preK-12 will ensure that the candidate has demonstrated the following competencies:

1. Understanding of the knowledge, skills, and processes of health and physical education as defined in the Virginia Standards of Learning.

2. Understanding of the basic content knowledge needed to teach the structure and function of the human body systems.

3. Understanding of the basic content knowledge needed to teach the scientific principles of movement as it applies to:

a. Personal health-related fitness (flexibility, strength, aerobic endurance, body composition); and

b. Personal skill-related fitness (coordination, agility, power, balance, speed).

4. Basic understanding of the administration of a health and physical education program, including:

a. Instruction;

b. Student safety and other legal issues;

c. Assessment; and

d. Its role in comprehensive school health.

5. Understanding of the knowledge, skills, and processes for teaching health education, including:

a. Personal health and fitness;

b. Mental and emotional health;

c. Nutrition;

d. Tobacco, alcohol, and other drugs;

e. Safety and emergency care (first aid, CPR, universal precautions);

f. Injury prevention and rehabilitation;

g. Consumer health;

h. Diseases prevention and treatment; and

i. Environmental health.

6. Understanding of the knowledge, skills, and processes for teaching physical education, including:

a. Sequential preK-12 instruction in a variety of movement forms that include:

(1) Cooperative activities;

(2) Rhythms and dance; and

(3) Team and individual activities;

b. Activities for the physically and mentally challenged; and

c. Activities designed to help students understand, develop, and value personal fitness.

7. Understanding of and ability to teach:

a. The relationship between a physically active lifestyle and health;

b. The cultural significance of dance, leisure, competition, and sportsmanship; and

c. The use of new and emerging instructional technology.

8. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

B. Endorsement requirements. The candidate must have:

1. Graduated from an approved teacher preparation program in health and physical education; or

2. Completed a major in health and physical education or 45 semester hours of course work distributed in the following areas:

a. Personal health and safety: 6 semester hours;

b. Human anatomy, physiology, and kinesiology: 12 semester hours;

c. General health and physical education theory, including planning, administration, and assessment principles: 6 semester hours;

d. Physical education methodology courses, including team, individual, adaptive, cooperative activities, rhythms and dance: 9 semester hours;

e. Health methods courses: 6 semester hours; and

f. Health and physical education electives: 6 semester hours.

8VAC20-21-290. History and social science.

A. The program in history and social science will ensure that the candidate has demonstrated the following competencies:

1. Understanding of the knowledge, skills, and processes of history and the social science disciplines as defined by the Virginia History and Social Science Standards of Learning and how the standards provide the foundation for teaching history and the social sciences, including in:

a. United States history.

- (1) The evolution of the American constitutional republic and its ideas, institutions, and practices from the colonial period to the present; the American Revolution, including ideas and principles preserved in significant Virginia and United States historical documents as required by §22.1-201 of the Code of Virginia (Declaration of American Independence, the general principles of the Constitution of the United States, the Virginia Statute of Religious Freedom, the charters of April 10, 1606, May 23, 1609, and March 12, 1612, of the Virginia Company, and the Virginia Declaration of Rights); and historical challenges to the American political system;
- (2) The influence of religious traditions on American heritage and contemporary American society;
- (3) The influence of immigration on American political, social, and economic life;
- (4) The origins, effects, aftermath and significance of the two world wars, the Korean and Vietnam conflicts, and the Post Cold War Era;
- (5) The social, political, and economic transformations in American life during the 20th century;
- (6) The tensions between liberty and equality, liberty and order, region and nation, individualism and the common welfare, and between cultural diversity and national unity; and
- (7) The difference between a democracy and a republic.

b. World history.

- (1) The political, philosophical, and cultural legacies of ancient American, Asian, African, and European civilizations;
- (2) The origins, ideas, and institutions of Judaism, Christianity, Hinduism, Confucianism and Taoism, and Shinto, Buddhist and Islamic religious traditions;
- (3) Medieval society, institutions, and civilizations; feudalism and the evolution of representative government;
- (4) The social, political, and economic contributions of selected civilizations in Africa, Asia, Europe, and the Americas;
- (5) The culture and ideas of the Renaissance and the Reformation, European exploration, and the origins of capitalism and colonization;

(6) The cultural ideas of the Enlightenment and the intellectual revolution of the 17th and 18th centuries;

(7) The sources, results, and influences of the American and French revolutions;

(8) The social consequences of the Industrial Revolution and its impact on politics and culture;

(9) The global influence of European ideologies of the 19th and 20th centuries (liberalism, republicanism, social democracy, Marxism, nationalism, Communism, Fascism, and Nazism); and

(10) The origins, effects, aftermath and significance of the two world wars, the Korean and Vietnam conflicts, and the Post Cold War Era.

c. Civics/government and economics.

(1) The essential characteristics of limited and unlimited governments;

(2) The importance of the Rule of Law for the protection of individual rights and the common good;

(3) The rights and responsibilities of American citizenship;

(4) The nature and purposes of constitutions and alternative ways of organizing constitutional governments;

(5) American political culture;

(6) Values and principles of the American constitutional republic;

(7) The structures, functions, and powers of local, state, and national governments; and

(8) The structure and function of the United States market economy as compared with other economies.

d. Geography.

(1) Use of maps and other geographic representations, tools, and technologies to acquire, process, and report information;

(2) Physical and human characteristics of places;

(3) Relationship between human activity and the physical environment;

(4) Physical processes that shape the surface of the Earth;

- (5) Characteristics and distribution of ecosystems on the Earth;
  - (6) Characteristics, distribution, and migration of human populations;
  - (7) Patterns and networks of economic interdependence;
  - (8) Processes, patterns, and functions of human settlement;
  - (9) How the forces of conflict and cooperation influence the division and control of the Earth's surface;
  - (10) How physical systems affect human systems;
  - (11) Changes that occur in the meaning, use, distribution, and importance of resources;  
and
  - (12) Applying geography to interpret the past and the present and to plan for the future.
2. Understanding of history and social science to appreciate the significance of:
    - a. Diverse cultures and shared humanity;
    - b. How things happen, how they change, and how human intervention matters;
    - c. The interplay of change and continuity;
    - d. How people in other times and places have struggled with fundamental questions of truth, justice, and personal responsibility;
    - e. The importance of individuals who have made a difference in history and the significance of personal character to the future of society;
    - f. The relationship among history, geography, civics, and economics;
    - g. The difference between fact and conjecture, evidence and assertion, and the importance of framing useful questions;
    - h. How ideas have real consequences; and
    - i. The importance of primary documents and the potential problems with second-hand accounts.
  3. Understanding of the use of the content and processes of history and social science instruction, including:

- a. Fluency in historical analysis skills;
- b. Skill in debate, discussion, and persuasive writing;
- c. The ability to organize key social science content into meaningful units of instruction;
- d. The ability to provide instruction using a variety of instructional techniques;
- e. The ability to evaluate primary and secondary instructional resources, instruction, and student achievement; and
- f. The ability to incorporate appropriate technologies into social science instruction.

4. Understanding of the content, processes, and skills of one of the social sciences disciplines at a level equivalent to an undergraduate major, along with sufficient understanding of the three supporting disciplines to ensure:

- a. The ability to teach the processes and organizing concepts of social science;
- b. An understanding of the significance of the social sciences; and
- c. Student achievement in the social sciences.

5. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

B. Endorsement requirements. The candidate must have:

1. Graduated from an approved teacher preparation program in history and social science; or
2. Completed 51 semester hours of course work distributed in the following areas:
  - a. History: a major in history or 18 semester hours in history (must include American history, Virginia history, English history, and world history);
  - b. Political science: a major in political science or 18 semester hours in political science;
  - c. Geography: 9 semester hours; and
  - d. Economics: 6 semester hours.

C. Add-on endorsement requirements in history, political science, geography, and economics. The candidate must have:

1. An endorsement in history, political science, geography, or economics; and

2. Completed 21 semester hours of course work in the additional social science area (history, political science, geography, or economics) sought.

8VAC20-21-300. Journalism (add-on endorsement).

A. The program in journalism (add-on endorsement) will ensure that the candidate has demonstrated the following competencies:

1. Understanding of the history and functions of journalism in American culture including the value of freedom of speech and press and the complexity of legal and ethical issues;
2. Understanding of the knowledge of and experience in theory and practice of both print and nonprint media including design and layout production and the use of technology; and
3. Possession of skills in journalistic management and the processes of interviewing and writing, including news articles, features, ad copy, obituaries, reviews, editorials, and captions; their differences and the ability to analyze and evaluate journalism.

B. Endorsement requirements. The candidate must have:

1. A baccalaureate degree and an endorsement in any teaching area; and
2. A minimum of 15 semester hours in journalism.

8VAC20-21-310. Keyboarding (add-on endorsement).

A. The program in keyboarding (add-on endorsement) will ensure that the candidate has demonstrated the following competencies:

1. Possession of skills in fingering and keyboard manipulation techniques to model and provide touch keyboarding instruction;
2. Ability to provide instruction that allows students to develop touch fingering techniques in a kinesthetic response to the keyboard required for rapid, accurate entry of data and information; and
3. Ability to provide instruction for current procedures in formatting documents.

B. Endorsement requirements. The candidate must have:

1. An endorsement in any teaching area; and

2. Completion of 6 semester hours in keyboarding. Experiences shall include keyboarding and word processing/computer applications.

8VAC20-21-320. Library media preK-12.

A. The program in library media preK-12 will ensure that the candidate has demonstrated the following competencies:

1. Proficiency in selecting, evaluating, organizing, and processing materials and equipment;
2. Proficiency in the production and use of a variety of media (print and nonprint);
3. Proficiency in organizing, managing, and evaluating media programs;
4. Proficiency in applying the principles of curriculum planning, learning, and teaching as they relate to informational skills and to the role of the library-media specialist as a resource person and as a member of the educational team;
5. Understanding of the knowledge, skills, and processes of the issues surrounding ethical access and use of information, including copyright, intellectual freedom, privacy, and security; and
6. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

B. Endorsement requirements. The candidate must have:

1. Graduated from an approved preparation program in library media; or
2. Completed 24 semester hours distributed in each of the following areas:
  - a. Selection and utilization of library-media materials and equipment, including the various technologies of up-to-date libraries (computers, instructional software, and the Internet in the teaching/learning process);
  - b. Production of media and instructional materials;
  - c. Organization, administration, and evaluation of a library-media center, including ethical issues;
  - d. Theory and management of reference and bibliography;
  - e. Selection of print-media materials for children and adolescents;
  - f. Organization and technical processing of materials; and

g. The role of the library-media specialist as a resource person for students and professional staff in curriculum design and the integration of library-media services in instruction; and

3. Participated in a clinical experience to give the applicant an opportunity to apply the skills, understandings, and competencies listed above. One year of successful, full-time experience as a school librarian in an accredited public or nonpublic school may be accepted to meet this requirement.

8VAC20-21-330. Mathematics.

A. The program in mathematics will ensure that the candidate has demonstrated the following competencies:

1. Understanding of the knowledge, skills, and processes of the Virginia Mathematics Standards of Learning and how curriculum may be organized to teach these standards to diverse learners;
2. Understanding of a core knowledge base of concepts and procedures within the discipline of mathematics, including the following strands: number systems and number theory; geometry and measurement; analytic geometry; statistics and probability; functions and algebra; calculus; and discrete mathematics;
3. Understanding of the sequential nature of mathematics and the mathematical structures inherent in the content strands;
4. Understanding of the connections among mathematical concepts and procedures and their practical applications;
5. Understanding of and the ability to use the four processes --becoming mathematical problem solvers, reasoning mathematically, communicating mathematically, and making mathematical connections --at different levels of complexity;
6. Understanding of the history of mathematics, including the contributions of different individuals and cultures toward the development of mathematics and the role of mathematics in culture and society;
7. Understanding of major current curriculum studies and trends in mathematics;
8. Understanding of the role of technology and the ability to use graphing utilities and computers in the teaching and learning of mathematics;
9. Understanding of and the ability to select, adapt, evaluate and use instructional materials and resources, including professional journals and technology;

10. Understanding of and the ability to use strategies for managing, assessing, and monitoring student learning, including diagnosing student errors;

11. Understanding of and the ability to use strategies to teach mathematics to diverse learners; and

12. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

B. Endorsement requirements. The candidate must have:

1. Graduated from an approved teacher preparation program in mathematics; or

2. Completed a major in mathematics or 36 semester hours of course work distributed in each of the following areas:

a. Algebra --Experience shall include linear and abstract algebra;

b. Geometry --Experience shall include Euclidean and non-Euclidean geometries;

c. Analytic geometry;

d. Probability and statistics;

e. Discrete mathematics --Experience shall include the study of mathematical properties of finite sets and systems and linear programming;

f. Computer science --Experience shall include computer programming; and

g. Calculus --Experience shall include multi-variable calculus.

8VAC20-21-340. Mathematics--Algebra I (add-on endorsement).

A. The program in Algebra I will ensure that the candidate has demonstrated the following competencies:

1. Understanding of the mathematics relevant to the content identified in the Mathematics Standards of Learning and how the standards provide the foundation for teaching middle level mathematics through Algebra I. The use of technology must be used in enhancing the student's ability to develop concepts, compute, solve problems, and apply mathematics in practical applications with the mathematics content, including:

a. The structure of real numbers and subsets, basic operations, and properties;

b. Elementary number theory, ratio, proportion, and percent;

c. Algebra, trigonometry, and analytic geometry: operations with monomials and polynomials; algebraic fractions; linear, quadratic, and higher degree equations and inequalities; linear systems of equations and inequalities; nonlinear systems of equations; radicals and exponents; complex numbers; arithmetic and geometric sequences and series; algebraic, trigonometric, logarithmic, exponential, absolute value, and step functions; domain and range of functions; composite and inverse functions; one-to-one mapping; transformations between graphical, tabular and symbolic form of functions; direct and inverse variation; line and curve of best fit; conics; and recognition and application of trigonometric identities;

d. Calculus: applications of limits and standard integration and differentiation;

e. Linear algebra: matrices, vectors, and linear transformations;

f. Measurement systems, including U.S. customary and metric;

g. Geometry: geometric figures, their properties, relationships, and application of the Pythagorean Theorem; using deductive axiomatic methods of proof and inductive reasoning; perimeter, area and surface area of two- and three-dimensional figures; coordinate and transformational geometry; and constructions;

h. Probability and statistics: experimental and theoretical probability; prediction; graphical representations, including box-and-whisker plots; and measures of central tendency, range, standard deviation, and simple distributions;

i. Discrete mathematics: symbolic logic, sets, permutations and combinations, functions that are defined recursively, and linear programming; and

j. Computer science: terminology, simple programming, and software applications.

2. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

B. Endorsement requirements. The candidate must have:

1. Completed an approved teacher preparation program in Algebra I; or

2. Completed the following requirements. The candidate must have:

a. A baccalaureate degree from an accredited institution and an endorsement in any teaching area; and

b. Completed 24 semester hours which include course work in each of the following areas:

(1) Elementary functions and introductory college algebra;

- (2) Trigonometry;
- (3) Linear algebra;
- (4) Calculus;
- (5) Euclidean geometry;
- (6) Probability or statistics or both;
- (7) Discrete mathematics; and
- (8) Computer science.

8VAC20-21-350. Music education--instrumental preK-12.

A. The program in music education--instrumental preK-12 will ensure that the candidate has demonstrated the following competencies:

1. Understanding of the common elements of music --rhythm, melody, harmony, timbre, texture, dynamics, form --and their relationship with each other and to employ this understanding in the analysis of music.
2. Effective musicianship through the development of:
  - a. Basic skills in conducting, in score reading, in teaching musical courses and in rehearsal techniques for choral and instrumental music;
  - b. Skills in composing, arranging, and adapting music to meet the classroom needs and ability levels of school performing groups;
  - c. Skills in providing and directing creative experiences and improvising when necessary;
  - d. Proficiency, sufficient for classroom instruction, on keyboard or other accompanying instrument; and
  - e. The ability to perform in ensembles.
3. Knowledge of music history and literature with emphasis on the relationship of music to culture and the ability to place compositions in historical and stylistic perspective.
4. Knowledge of a comprehensive program of music education based upon sound philosophy, content, and methodology for teaching in elementary, middle, and secondary schools.

5. Observation and professional laboratory experiences with pupils in elementary, middle, and secondary schools, including instruction of instrumental groups.
6. Specialization on a musical instrument and functional teaching knowledge on each of the string, brass, woodwind, and percussion instruments.
7. Competency in rehearsing and conducting combined instrumental and vocal groups. In addition, the program shall provide instruction in business procedures, organization, and management of large and small instrumental ensembles, with knowledge of vocal techniques in rehearsing and conducting combined instrumental and vocal groups.
8. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

B. Endorsement requirements. The candidate must have:

1. Graduated from an approved teacher preparation program in music education--instrumental; or
2. Completed 42 semester hours of course work in the following areas:
  - a. Basic music knowledge (experiences shall be related to music theory, music history, and literature): 18 semester hours.
  - b. Musical performance (experiences shall consist of developing competency in a primary performance medium (band or orchestral instrument), and in a secondary performance medium (band, orchestral, or keyboard instrument), and in teaching, rehearsing, and conducting ensembles): 18 semester hours.
  - c. Electives (with course work selected from either of the two areas above): 6 semester hours.

8VAC20-21-360. Music education--vocal/choral preK-12.

A. The program in music education--vocal/choral preK-12 will ensure that the candidate has demonstrated the following competencies:

1. Understanding of the common elements of music --rhythm, melody, harmony, timbre, texture, dynamics, form --and their relationship with each other and to employ this understanding in the analysis of music.
2. Effective musicianship through the development of:
  - a. Basic skills in conducting, in score reading, in teaching musical courses, and in rehearsal techniques for choral and instrumental music;

- b. Skills in composing, arranging, and adapting music to meet the classroom needs and ability levels of school performing groups;
- c. Skills in providing and directing creative experiences and improvising when necessary;
- d. Proficiency, sufficient for classroom instruction, on keyboard or other accompanying instrument; and
- e. The ability to perform in ensembles.

3. Knowledge of music history and literature with emphasis on the relationship of music to culture and the ability to place compositions in historical and stylistic perspective.

4. Knowledge of a comprehensive program of music education based upon sound philosophy, content, and methodology for teaching in elementary, middle, and secondary schools.

5. Observation and professional laboratory experiences with pupils at elementary, middle, and secondary levels, including instruction of choral groups.

6. Specialization in the methods, materials, and media appropriate to the teaching of vocal/choral and general music at elementary, middle, and secondary levels.

7. Competency in rehearsing and conducting choral ensembles and combined vocal and instrumental school groups. In addition, the program shall provide instruction in business procedures, organization, and management of large and small choral ensembles, with knowledge of instrumental techniques in rehearsing and conducting combined vocal and instrumental school groups.

8. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

B. Endorsement requirements. The candidate must have:

1. Graduated from an approved teacher preparation program in music education--vocal/choral; or

2. Completed 42 semester hours of course work distributed in the following areas:

a. Basic music knowledge (experiences shall be related to music theory, music history, and literature): 18 semester hours.

b. Musical performance (experiences shall consist of developing competency in a primary and secondary medium, selected from voice or keyboard; and in teaching, rehearsing, and conducting ensembles): 18 semester hours.

c. Electives (with course work selected from either of the two areas above): 6 semester hours.

8VAC20-21-370. Science--biology.

A. The program in biology will ensure that the candidate demonstrates the following competencies:

1. Understanding of the knowledge, skills, and processes of the four core science disciplines as defined in the Virginia Science Standards of Learning and how these provide a sound foundation for teaching biology.
2. Understanding of the nature of science and scientific inquiry, including the:
  - a. Function of research design and experimentation;
  - b. Role and nature of the theory in explaining and predicting events and phenomena; and
  - c. Role of observation, measurement, data, and evidence in verifying and validating scientific concepts and principles.
3. Understanding of the knowledge, skills, and processes for teaching laboratory science, including the ability to:
  - a. Design instruction reflecting the goals of the Virginia Science Standards of Learning;
  - b. Conduct research projects and experiments;
  - c. Implement laboratory safety rules/procedures and ensure that students take appropriate safety precautions;
  - d. Organize key biological content into meaningful units of instruction;
  - e. Adapt instruction to diverse learners using a variety of techniques;
  - f. Evaluate student achievement, instructional materials, and teaching practices; and
  - g. Incorporate instructional technology to enhance student performance.
4. Understanding of the content, processes, and skills of biology, equivalent to an undergraduate degree in biology, with course work in genetics/molecular biology, botany, zoology, anatomy/physiology, and ecology.
5. Understanding of basic physics, chemistry (including organic chemistry), the Earth sciences, and mathematics (including statistics) to ensure:

- a. The placement of biology in an appropriate interdisciplinary context;
  - b. The ability to teach the processes and organizing concepts common to the natural and physical sciences; and
  - c. Student achievement in biology.
6. Understanding of the contributions and significance of biology, including:
- a. Its social and cultural significance;
  - b. The relationship of biology and other sciences to technology; and
  - c. The historical development of scientific concepts and scientific reasoning.
7. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

B. Endorsement requirements. The candidate must have:

1. Graduated from an approved teacher preparation program in biology;
2. Completed a major in biology or 32 semester hours in biology, including genetics/molecular biology, botany, zoology, anatomy/physiology, ecology and other preparation consistent with the above competencies; or
3. Earned an endorsement in another science discipline and at least 18 credits in biology, including preparation in each of the following areas: genetics/molecular biology, botany, zoology, anatomy/physiology, and ecology.

8VAC20-21-380. Science--chemistry.

A. The program in chemistry will ensure that the candidate demonstrates the following competencies:

1. Understanding of the knowledge, skills, and processes of the four core science disciplines as defined in the Virginia Science Standards of Learning and how they provide a sound foundation for teaching chemistry.
2. Understanding of the nature of science and scientific inquiry including the:
  - a. Function of research design and experimentation;
  - b. Role and nature of the theory in explaining and predicting events and phenomena; and

- c. Role of observation, measurements, data, and evidence in verifying and validating scientific concepts and principles.
3. Understanding of the knowledge, skills, and processes for teaching laboratory science, including the ability to:
    - a. Design instruction reflecting the goals of the Virginia Science Standards of Learning;
    - b. Conduct research projects and experiments;
    - c. Implement laboratory safety rules/procedures and ensure that students take appropriate safety precautions;
    - d. Organize key chemistry content into meaningful units of instruction;
    - e. Adapt instruction to diverse learners using a variety of techniques;
    - f. Evaluate student achievement, instructional materials, and teaching materials; and
    - g. Incorporate instructional technology to enhance student performance.
  4. Understanding of content, processes, and skills of chemistry, equivalent to an undergraduate degree in chemistry, with course work in inorganic chemistry, organic chemistry, physical chemistry, and analytical chemistry.
  5. Understanding of basic physics, biology, the Earth sciences, and mathematics (including statistics and calculus) to ensure:
    - a. The placement of chemistry in an appropriate interdisciplinary context;
    - b. The ability to teach the processes and organizing concepts common to the natural and physical sciences; and
    - c. Student achievement in chemistry.
  6. Understanding of the contributions and significance of chemistry, including:
    - a. Its social and cultural significance;
    - b. The relationship of chemistry and other sciences to technology; and
    - c. The historical development of scientific concepts and scientific reasoning.
  7. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

B. Endorsement requirements. The candidate must have:

1. Graduated from an approved teacher preparation program in chemistry;
2. Completed a major in chemistry or 32 semester hours in chemistry, including inorganic chemistry, organic chemistry, physical chemistry, and analytical chemistry and other preparation consistent with the above competencies; or
3. Earned an endorsement in another science discipline and at least 18 credits in chemistry, including preparation in each of the following areas: inorganic chemistry, organic chemistry, physical chemistry, and analytical chemistry.

8VAC20-21-390. Science--Earth science.

A. The program in Earth science will ensure that the candidate demonstrates the following competencies:

1. Understanding of the knowledge, skills, and processes of the four core science disciplines as defined in the Virginia Science Standards of Learning and how these provide a sound foundation for teaching Earth science.
2. Understanding of the nature of science and scientific inquiry, including the:
  - a. Function of research design and experimentation;
  - b. Role and nature of the theory in explaining and predicting events and phenomena; and
  - c. Role of observation, measurement, data, and evidence in verifying and validating scientific concepts and principles.
3. Understanding of the knowledge, skills, and processes for teaching laboratory science, including the ability to:
  - a. Design instruction reflecting the goals of the Virginia Science Standards of Learning;
  - b. Conduct research projects and experiments;
  - c. Implement laboratory safety rules/procedures and ensure that students take appropriate safety precautions;
  - d. Organize key Earth science content into meaningful units of instruction;
  - e. Adapt instruction to diverse learners using a variety of techniques;
  - f. Evaluate student achievement, instructional materials, and teaching practices; and

g. Incorporate instructional technology to enhance student performance.

4. Understanding of the content, processes, and skills of Earth science, equivalent to an undergraduate degree in geology (or a related area), with course work in geology, oceanography, meteorology, and astronomy.

5. Understanding of basic physics, chemistry (including organic chemistry), biology, and mathematics to ensure:

a. The placement of Earth science in an appropriate interdisciplinary context;

b. The ability to teach the processes and organizing concepts common to the natural and physical sciences; and

c. Student achievement in Earth science.

6. Understanding of the contributions and significance of Earth science, including:

a. Its social and cultural significance;

b. The relationship of Earth science and other sciences to technology; and

c. The historical development of scientific concepts and scientific reasoning.

7. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

B. Endorsement requirements. The candidate must have:

1. Graduated from an approved teacher preparation program in Earth science;

2. Completed a major in geology with at least one course in each of the following: oceanography, meteorology, and astronomy, or 32 semester hours in Earth sciences, including geology (18 semester hours), oceanography, meteorology, and astronomy and other preparation consistent with the above competencies; or

3. Earned an endorsement in another science discipline and at least 18 credits in Earth sciences, including preparation in each of the following areas: geology, oceanography, meteorology, and astronomy.

8VAC20-21-400. Science--physics.

A. The program in physics will ensure that the candidate demonstrates the following competencies:

1. Understanding of the knowledge, skills, and processes of the four core science disciplines as defined in the Virginia Science Standards of Learning and how these provide a sound foundation for teaching physics.
2. Understanding of the nature of science and scientific inquiry, including the:
  - a. Function of research design and experimentation;
  - b. Role and nature of the theory in explaining and predicting events and phenomena; and
  - c. Role of observation, measurement, data, and evidence in verifying and validating scientific concepts and principles.
3. Understanding of the knowledge, skills, and processes for teaching laboratory science, including the ability to:
  - a. Design instruction reflecting the goals of the Virginia Science Standards of Learning;
  - b. Conduct research projects and experiments;
  - c. Implement laboratory safety rules/procedures and ensure that students take appropriate safety precautions;
  - d. Organize key physics content into meaningful units of instruction;
  - e. Adapt instruction to diverse learners using a variety of techniques;
  - f. Evaluate student achievement, instructional materials, and teaching materials; and
  - g. Incorporate instructional technology to enhance student performance.
4. Understanding of content, processes, and skills of physics, equivalent to an undergraduate degree in physics, with course work in mechanics, electricity and magnetism, and optics.
5. Understanding of basic chemistry, biology, the Earth sciences, and mathematics (including statistics and calculus) to ensure:
  - a. The placement of physics in an appropriate interdisciplinary context;
  - b. The ability to teach the processes and organizing concepts common to the natural and physical sciences; and
  - c. Student achievement in physics.
6. Understanding of the contributions and significance of physics, including:

- a. Its social and cultural significance;
- b. The relationship of physics and other sciences to technology; and
- c. The historical development of scientific concepts and scientific reasoning.

7. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

B. Endorsement requirements. The candidate must have:

1. Graduated from an approved teacher preparation program in physics;
2. Completed a major in physics or 32 semester hours in physics, including mechanics, electricity and magnetism, and optics and other preparation consistent with the above competencies; or
3. Earned an endorsement in another science discipline and at least 18 credits in physics, including preparation in each of the following areas: mechanics, electricity and magnetism, and optics.

8VAC20-21-410. Special education early childhood (birth-age 5).

A. The program in special education early childhood (birth through age five) is designed to ensure through course work and field experiences in a variety of settings that the candidate has demonstrated the following competencies:

1. Understanding of the nature and characteristics of major disabling and at-risk conditions, including:
  - a. Trends for service delivery to the birth-through-age-five population;
  - b. An overview of early childhood special education;
  - c. Historical perspective of special education; and
  - d. Social development issues.
2. Understanding of the foundation of the legal aspects associated with students with disabilities, including:
  - a. Legislative and judicial mandates related to education and special education;
  - b. The Individuals with Disabilities Education Act (IDEA), Section 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act;

- c. Legal decisions related to persons with disabilities;
  - d. Current regulations and procedures governing special education to include individualized education program (IEP) development and/or individualized family service plan (IFSP); and
  - e. Disciplinary practices, policies and procedures and alternative placements/programs in schools.
3. Knowledge of the selection, administration, and interpretation of formal and informal assessment techniques for young children with disabling and at-risk conditions and their families.
  4. Understanding of the methods for providing instructional programs for early intervention, including:
    - a. Service delivery options;
    - b. Development of individualized education programs (IEPs) and individualized family service plans (IFSPs);
    - c. Curriculum development and implementation to ensure developmentally appropriate intervention techniques in the areas of self-help, motor, cognitive, social/emotional, and language.
  5. Understanding of behavior management and the application of principles of learning and child development to individual and group management using a variety of techniques that are appropriate to the age of that child.
  6. Understanding of speech and language development and intervention methods, including the effects of disabling and at-risk conditions on young children.
  7. Understanding of and experiences with the medical aspects of young children with disabling and at-risk conditions and the management of neurodevelopmental and motor disabilities, including emergency care and the role of health care professionals in the lives of individuals with disabilities.
  8. Skills in consultation, case management, and collaboration, including techniques in working with children, families, educators, related service providers, and other human service professionals which include:
    - a. Service coordination;
    - b. Interagency coordination;

- c. Integration with nondisabled peers;
  - d. Transition facilitation; and
  - e. Training, managing, and monitoring paraprofessionals.
9. Understanding of normal child growth and development from birth through age five.
10. Understanding of the theories and techniques of family-centered intervention, including:
- a. Multicultural issues and influence; and
  - b. Family issues.
11. Understanding of the standards of professionalism.
12. Completion of supervised experiences at the preschool level in a variety of settings, including but not limited to home-based, school-based, and community-based.

B. Endorsement requirements. The candidate must have:

- 1. Graduated from an approved teacher preparation program in early childhood special education; or
- 2. Completed a major in early childhood special education or 27 semester hours in early childhood special education, including at least one course in each of the following: foundations, assessment, instructional programming, speech/language development and intervention, medical aspects, behavior management, consultation, child growth and development, and family-centered intervention consistent with the above competencies.

8VAC20-21-420. Special education hearing impairments preK-12.

A. The program in special education hearing impairments preK-12 is designed to ensure through course work and field experiences in a variety of settings that the candidate has demonstrated the following competencies:

- 1. Understanding of the characteristics of individuals with disabilities, including the following:
  - a. Characteristics of children and youth with disabilities: developmental and cognitive;
  - b. Characteristics of individuals with hearing impairments, including socio-cultural influences and health-related problems; and
  - c. Foundations of the education and culture of persons with hearing impairments.

2. Understanding of the foundation of the legal aspects associated with students with disabilities and students with hearing impairments, including:

a. Legislative and judicial mandates related to education and special education;

b. The Individuals with Disabilities Education Act (IDEA), Section 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act;

c. Legal decisions related to persons with disabilities;

d. Current regulations and procedures governing special education, including individualized education program (IEP) development, individualized family service plan (IFSP), and transition services; and

e. Disciplinary practices, policies and procedures and alternative placements/programs in schools.

3. Understanding of the foundation of assessment and evaluation with an emphasis on individuals who are hearing impaired, including:

a. Administering, scoring, and interpreting assessments, including norm-referenced, criterion-referenced, and curriculum-based individual and group assessments;

b. Interpreting assessments for eligibility, placement, and program uses;

c. Techniques to collect, record, and analyze information from observing students;

d. Diagnostic instruction using assessment data;

e. Techniques for recognizing capacity and diversity and its influence on student assessment and evaluation; and

f. Using data from student program evaluation.

4. Understanding of service delivery, classroom management, and instruction, including:

a. The application of current research in practice;

b. Classroom organization and curriculum development;

c. Curriculum adaptations and accommodations;

d. The development of language/literacy skills;

e. The use of technology;

- f. Classroom management, including behavior support systems and individual planning;
  - g. Methods and procedures for teaching persons with hearing impairments;
  - h. Instructional programming and modifications of curriculum to facilitate integration of students with disabilities into the continuum of programs and services with peers without disabilities;
  - i. Individual and group behavior management techniques; and
  - j. Career and vocational aspects of individuals with disabilities, including persons with hearing impairments, in society.
5. Skills in consultation, case management, and collaboration, including:
- a. Coordinating service delivery with other professionals in collaborative work environments;
  - b. Training, managing, and monitoring paraprofessionals;
  - c. Involving families in the education of their children with disabilities; and
  - d. Cooperating with community agencies and resources.
6. Understanding of speech, language, and hearing development, including:
- a. Speech and language development and the effects of disabling conditions and cultural diversity on typical language development;
  - b. The effects of hearing impairments and cultural diversity on language development;
  - c. Anatomy of speech structures, auditory and visual mechanisms, production, transmission and psychophysical characteristics of sound; and
  - d. General and specific effects of hearing impairment on production and reception of speech.
7. Understanding of audiology, including:
- a. Diagnosis in hearing evaluation, testing procedures and characteristics of amplification devices and their application to the instructional processes; and

b. Individual, group amplification systems, cochlear implant systems and other assistive/augmentative communication devices with emphasis on utilization in educational environments.

8. Understanding of communication modalities to include various modalities of communication, including cued speech, speech reading, verbal communication, and demonstrated proficiency in sign language communication.

9. Understanding of the standards for professionalism.

10. Completion of supervised classroom experiences at the elementary and secondary levels with students who have hearing impairments.

B. Endorsement requirements. The candidate must have:

1. Graduated from an approved teacher preparation program in special education hearing impairments; or

2. Completed a major in special education hearing impairments or 27 semester hours in education of the hearing impaired, including at least one course in foundations/legal aspects of special education, characteristics of individuals with hearing impairments, psychoeducational assessment, instructional programming, speech-language development, behavior management, audiology, speech and hearing science, and communication modalities, consistent with the above competencies.

8VAC20-21-430. Core competencies for special education: emotional disturbance K-12, learning disabilities K-12, mental retardation K-12, and severe disabilities K-12.

The program in special education is designed to ensure through course work and field experiences in a variety of settings that the candidate has demonstrated the following core competencies to prepare children and youth for participation in the general education curriculum and within the community to the maximum extent possible. The candidate must also complete the competencies in at least one endorsement area of special education and those required under professional studies, including reading and language acquisition.

1. Knowledge of the foundation for educating students with disabilities, including:

a. Historical perspectives, models, theories, philosophies, and trends that provide the basis for special education practice;

b. Characteristics of children and youth with disabilities relative to age, varying levels of severity, and developmental differences manifested in cognitive, linguistic, physical, psychomotor, social, or emotional functioning;

- c. Normal patterns of development (i.e., physical, psychomotor, cognitive, linguistic, social, emotional development and their relationship to the various disabilities);
  - d. Medical aspects of disabilities;
  - e. The dynamic influence of the family system and cultural/environmental milieu and related issues pertinent to the education of students with disabilities;
  - f. Educational implications of the various disabilities; and
  - g. Understanding of ethical issues and the practice of accepted standards of professional behavior.
2. An understanding and application of the legal aspects and regulatory requirements associated with identification, education, and evaluation of students with disabilities, including:
- a. Legislative and judicial mandates related to education and special education (e.g., the Individuals with Disabilities Education Act (IDEA), §504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act);
  - b. Current regulations governing special education (e.g., individualized education program (IEP) development; disciplinary practices, policies, and procedures; and alternative placements/programs in schools); and
  - c. "Rights and responsibilities" of parents, students, teachers, and schools as they relate to individuals with disabilities and disability issues.
3. An understanding and application of the foundation of assessment and evaluation related to best special education practice, including:
- a. Ethical issues and responsibilities in the assessment of individuals with disabilities;
  - b. Procedures for screening, prereferral, referral, and eligibility determinations;
  - c. Factors that may influence assessment findings such as cultural, behavioral, and learning diversity;
  - d. Administration, scoring, and interpretation of commonly used individual and group instruments, including norm-referenced, criterion-referenced, and curriculum-based measures as well as task analysis, observation, portfolio, and environmental assessments; and
  - e. Synthesis and interpretation of assessment findings for eligibility, program planning, and program evaluation decisions.

4. An understanding and application of service delivery, curriculum, and instruction of students with disabilities, including:

- a. Classroom organization and curriculum development;
- b. Scope and sequence of the general education curriculum;
- c. Complex nature of language acquisition and reading (see reading competencies in 8VAC20-21-170 4 b, Professional studies requirements);
- d. Alternative ways to teach content material including curriculum adaptation and curriculum modifications;
- e. Procedures to develop, provide, and evaluate instruction consistent with students' individual needs;
- f. Strategies to promote successful integration of students with disabilities with their nondisabled peers;
- g. Use of technology to promote student learning; and
- h. Structure and organization of general education classrooms and other instructional settings representing the continuum of special education services (to include field experiences).

5. An understanding and application of classroom management techniques and individual interventions, including techniques which:

- a. Promote emotional well-being and teach and maintain behavioral conduct and skills consistent with norms, standards, and rules of the educational environment;
- b. Address diverse approaches based upon behavioral, cognitive, affective, social and ecological theory and practice;
- c. Provide positive behavioral supports; and
- d. Are based on functional assessment of behavior.

6. The ability to prepare students and work with families to promote successful student transitions throughout the educational experience to include post-secondary training, employment, and independent living which addresses an understanding of long-term planning, career development, life skills, community experiences and resources, self-advocacy and self-determination, guardianship, and legal considerations.

7. Skills in consultation, case management, and collaboration, including:

- a. Coordination of service delivery with related service providers, general educators, and other professions in collaborative work environments;
- b. Preparing, managing, and monitoring paraprofessionals;
- c. Involvement of families in the education of their children with disabilities; and
- d. Cooperating with community agencies and other resource providers.

8VAC20-21-432. Special education: emotional disturbance K-12.

A. The program in emotional disturbance K-12 will ensure through course work and field experiences in a variety of settings that the candidate seeking endorsement in emotional disturbance has demonstrated the special education core competencies specified in 8VAC20-21-430 and the specific competency requirements for emotional disturbance specified in this section.

The candidate must demonstrate the following competencies:

1. Knowledge and understanding of the characteristics and needs of individuals with emotional disturbance. The characteristics should be considered in light of specific age-span/developmental issues and definitions related to cognitive functioning, multicultural influences, emotional adjustment, social development (e.g., the definitions in IDEA and the National Mental Health/Special Education Coalition definition).
2. Use of assessment, evaluation and other information to develop and implement individual educational programs and group instruction for individuals with emotional disturbance to facilitate integration of these students into the continuum of services, including the ability to:
  - a. Integrate academic instruction, affective education, and behavior management for individual students or groups of students to prevent inappropriate behavior;
  - b. Write and implement individualized education plans (IEP) to include positive behavioral interventions plans;
  - c. Delineate and apply the goals and intervention strategies and procedures related to a variety of theoretical approaches, including social learning theory;
  - d. Use a variety of positive strategies for the purpose of controlling targeted behaviors;
  - e. Develop and implement systematic behavior management plans for students using a variety of behavioral principles, including the ability to use appropriate and effective nonabusive, nonphysical, nonviolent punishment procedures in the context of a predominantly positive program;

f. Define and use skills in problem solving and conflict resolution to manage student behavior and social interaction skills;

g. Identify and apply instructional and remedial methodologies; and

h. Use self-protective strategies.

3. Completion of supervised classroom experiences with students with emotional disturbance K-12.

B. Endorsement requirements. The candidate must:

1. Have graduated from an approved program in special education: emotional disturbance;

2. Have completed a major in special education: emotional disturbance K-12 or 27 semester hours in the education of students with emotional disturbance with course work in the following: foundations/legal/ethical aspects of special education, psychoeducational assessment, reading/language acquisition, structure and organization of the continuum of services including the general education classroom, scope and sequence of the general education curriculum, behavior management, transition, consultation, characteristics of individuals with emotional disturbance, instructional programming and methods for students with emotional disturbance consistent with the above competencies. In addition the candidate must have completed supervised classroom experience with students with emotional disturbance. One year of successful, full-time teaching experience with students with emotional disturbance in an accredited public or nonpublic school may be accepted in lieu of student teaching; or

3. Possess a valid Virginia teaching license with an endorsement in at least one area of special education and complete course work and field experiences in a variety of settings, demonstrating the specific competency requirements in special education: emotional disturbance K-12. One year of successful, full-time teaching experience with students with emotional disturbance in an accredited public or nonpublic school may be accepted in lieu of student teaching.

8VAC20-21-434. Special education: learning disabilities K-12.

A. The program in learning disabilities K-12 will ensure through course work and field experiences in a variety of settings that the candidate seeking endorsement in learning disabilities has demonstrated the special education core competencies specified in 8VAC20-21-430 and the specific competency requirements for learning disabilities specified in this section.

The candidate must demonstrate the following competencies:

1. Knowledge and understanding of the theories, characteristics, etiology and needs of students with specific learning disabilities. These include:

- a. Related disabilities, such as attention deficit disorders;
- b. Specific age-span/developmental issues;
- c. Cognitive functioning, including intelligence, perception, neurobiology, linguistics, memory and thinking;
- d. Levels of severity;
- e. Multicultural influences;
- f. Social/emotional aspects, including social imperceptiveness, juvenile delinquency, and personal control attributes; and
- g. Medical aspects, including medication, nutrition, genetics, and neurology.

2. Knowledge of a wide range of assessment procedures for students with learning disabilities to assist in instruction and life planning. These include:

- a. Use of assessment procedures to identify individual instructional needs in areas including reading, receptive and expressive language, written language and mathematics; and
- b. Ability to interpret educational assessment results to parents, students, and other professionals.

3. Use of assessment, evaluation, and other information to develop and implement individualized educational programs (IEP) and group instruction for individuals with learning disabilities within the continuum of services. This includes the ability to:

- a. Teach and remediate skills in reading, receptive and expressive language, pragmatic language, written language, social skills, and mathematics;
- b. Provide explicit instruction of reading and spelling in a systematic and cumulative manner based upon understanding the structure and development of the English language at the sound, syllable, word and sentence levels; and understanding the relationship between spoken and written language, including the understanding and the application of phonology, phonological awareness, sound-symbol association, syllable patterns, morphology English orthography, and grammatical structures and the relationship between teaching written expression and reading comprehension;

c. Apply developmental and remedial methodologies, including systematic instruction, multisensory approaches, cognitive learning strategies, study skills, accommodations for diverse learning styles, and technology; and

d. Design alternative ways to teach content material to students with learning disabilities, including adapting and modifying the curriculum, and the selection of specialized instructional materials appropriate to the needs of the student with learning disabilities.

4. Completion of supervised classroom experiences with students with learning disabilities in grades K-12.

B. Endorsement requirements. The candidate must:

1. Have graduated from an approved teacher preparation program in special education: learning disabilities;

2. Have completed a major in special education: learning disabilities or 27 semester hours in the education of students with learning disabilities with course work in each of the following: foundations/legal/ethical aspects of special education, psychoeducational assessment, reading/language acquisition, structure and organization of the continuum of special education services including the general education classroom, scope and sequence of the general education curriculum, behavior management, transition, consultation, characteristics of individuals with learning disabilities, and instructional and remedial programs and methods for learning disabilities consistent with the above competencies. In addition a candidate must have completed a supervised classroom experience with students with learning disabilities. One year of successful, full-time teaching experience with students with learning disabilities in an accredited public or nonpublic school may be accepted in lieu of student teaching; or

3. Possess a valid Virginia teaching license with an endorsement in at least one area of special education and complete course work and field experiences in a variety of settings, demonstrating the specific competency requirements in learning disabilities K-12. One year of successful, full-time teaching experience with students with learning disabilities in an accredited public or nonpublic school may be accepted in lieu of student teaching.

8VAC20-21-436. Special education: mental retardation K-12.

A. The program in mental retardation K-12 will ensure through course work and field experiences in a variety of settings that the candidate seeking endorsement in mental retardation has the special education core competencies specified in 8VAC20-21-430 and the specific competency requirements for mental retardation specified in this section.

The candidate must demonstrate the following competencies:

1. Knowledge and understanding of the definition, characteristics and needs of students with mental retardation. These include:

- a. Cognitive functioning;
- b. Multicultural influences;
- c. Emotional adjustment;
- d. Social development;
- e. Language development;
- f. Adaptive behavior; and
- g. Medical/health issues.

2. Use of alternative assessment, evaluation, and other information to develop and implement individual educational programs and group instruction for individuals with mental retardation to facilitate integration of these students into the continuum of services. This includes:

- a. Proficiency in adapting age-appropriate curriculum to facilitate instruction within the general education setting, to include partial participation of students in tasks;
- b. Ability to teach skills in academic areas including reading, receptive and expressive language, and mathematics and to facilitate the transfer and generalization to functional context;
- c. Ability to utilize research-supported instructional strategies and practices, including functional embedded skills approach, community-based instruction, task analysis, multisensory, study skills, diverse learning styles, and concrete/manipulative techniques;
- d. Ability to teach culturally responsive functional skills relevant to independence in the community, personal living, employment, self-advocacy and self determination; and
- e. Ability to evaluate and use assistive technology for communication, independent living, and the assessment of student needs.

3. Completion of supervised classroom experiences with students with mental retardation K-12.

B. Endorsement requirements. The candidate must:

1. Have graduated from an approved program in special education: mental retardation;
2. Have completed a major in special education: mental retardation K-12 or 27 semester hours in the education of students with mental retardation with course work in the

following: foundations/legal/ethical aspects of special education, psychoeducational assessment, reading/language acquisition, structure and organization of the continuum of services including the general education classroom, scope and sequence of the general education curriculum, behavior management, transition, consultation, characteristics of individuals with mental retardation, instructional programming and methods for students with mental retardation consistent with the above competencies. In addition the candidate must have completed a supervised classroom experience with students with mental retardation. One year of successful, full-time teaching experience with students with mental retardation in an accredited public or nonpublic school may be accepted in lieu of student teaching; or

3. Possess a valid Virginia teaching license with an endorsement in at least one area of special education and complete course work and field experiences in a variety of settings, demonstrating the specific competency requirements in special education: mental retardation K-12. One year of successful, full-time teaching experience with students with mental retardation in an accredited public or nonpublic school may be accepted in lieu of student teaching.

8VAC20-21-440. Special education: severe disabilities K-12.

A. The program in severe disabilities K-12 will ensure through course work and field experience in a variety of settings that the candidate seeking endorsement in severe disabilities has demonstrated the special education core competencies specified in 8VAC20-21-430 and the specific competency requirements for severe disabilities K-12 specified in this section.

The candidate must demonstrate the following competencies:

1. Knowledge and understanding of the characteristics and needs of individuals with severe disabilities. This includes the emotional, social, neurobiological, linguistic, medical and educational aspects of severe disabilities based upon current research, best practice and legal considerations.
2. The use of alternative assessment, evaluation and other information to develop and implement individual educational programs and group instruction for individuals with severe disabilities, including:
  - a. The ability to develop, plan, and teach a functional and age-appropriate curriculum including skills in self-care, independent living, leisure/recreation, school and community use, functional academics, and vocational planning;
  - b. Knowledge and proficiency in implementing direct and systematic instruction;
  - c. Knowledge of unique physical needs, including positioning and handling, medical considerations, seizures, etc.;

d. Proficiency in adapting age-appropriate curriculum to facilitate instruction within the general education setting, to include partial participation of students in tasks and skills facilitating collaboration and support from peers with and without disabilities;

e. The ability to select and use augmentative and alternative communication methods and systems;

f. The ability to select and use assistive technology to facilitate learning and independent living; and

g. An understanding of the impact of speech-language development on behavior and social interactions.

3. The ability to implement and evaluate group management techniques and individual interventions that maintain emotional, behavioral, and social skills consistent with the norms, standards, and rules of the educational environment. These techniques and interventions include:

a. Identifying the origin and function of the behavior;

b. Identifying and teaching alternative behaviors;

c. Developing positive behavior support plans;

d. Developing schedules and routines;

e. Applying behavioral research; and

f. Providing positive behavioral support.

4. Complete supervised classroom experience with students with severe disabilities K-12.

B. Endorsement requirements. The candidate must:

1. Have graduated from an approved program in special education: severe disabilities;

2. Have completed a major in special education: severe disabilities K-12 or 27 semester hours in the education of students with severe disabilities with course work in the following: foundations/legal/ethical aspects of special education, psychoeducational assessment, reading/language acquisition, structure and organization of the continuum of special education services including the general education classroom, scope and sequence of the general education curriculum, behavior management, transition, consultation, characteristics of individuals with severe disabilities, instructional programming and methods for severe disabilities consistent with the above competencies. In addition the candidate must have completed a supervised classroom experience with students with severe disabilities. One year of successful, full-time teaching experience with students

with severe disabilities in an accredited public or nonpublic school may be accepted in lieu of student teaching; or

3. Possess a valid Virginia teaching license with an endorsement in at least one area of special education and complete course work and field experiences in a variety of settings, demonstrating the specific requirements in severe disabilities K-12. One year of successful, full-time teaching experience with students with severe disabilities in an accredited public or nonpublic school may be accepted in lieu of student teaching.

8VAC20-21-450. Special education speech-language disorders preK-12.

A. The Virginia Department of Education has received approval from the Office of Special Education Programs for an extension to the year 2005 for full implementation of the master's degree requirement for licensure of speech-language pathologists. Individuals with a baccalaureate degree in speech-language pathology may be licensed provisionally to provide speech-language services until 1999. The following requirements must be met within the three-year period of the provisional license:

1. Obtain passing scores on the professional teacher's assessment;
2. Complete course work in professional studies;
3. Successfully complete 6 graduate hours of course work in the areas of articulation/phonology disorders and language disorders; and
4. Be admitted to a graduate program in speech-language pathology.

B. The program in special education speech-language disorders preK-12 will ensure that the candidate has demonstrated the following competencies:

1. Understanding of the knowledge, skills, and processes of communication, oral and written, as defined in the Virginia Standards of Learning and how these are interrelated in forming a sound foundation for the understanding of speech and language acquisition.
2. Understanding of the knowledge, skills and processes of:
  - a. Normal development and the use of speech, voice, hearing, and language; and
  - b. Basic sciences (biology and physics) and the basic communication sciences (acoustics, physiological processes of speech, hearing and linguistics).
3. Understanding of current principles, procedures, techniques, and instruments in:
  - a. The evaluation of speech, language, voice and hearing;
  - b. Psycho-educational assessments; and

c. Research design.

4. Understanding of the knowledge, skills, and processes of:

a. Various types of disorders of speech, language, voice and hearing classifications, causes, and manifestations; and

b. Relationships among speech, language, voice and hearing problems, especially multiple disabling conditions.

5. Understanding of the knowledge, skills, and processes of the principles of remedial procedures and instrumentation in the habilitation, prevention and rehabilitation of disorders of articulation, language, fluency, voice, resonance, and hearing.

6. Understanding of the knowledge, skills, and processes of the evaluation and treatment of disorders of the oral and pharyngeal mechanisms as they relate to communication, including but not limited to dysphasia.

7. A level of knowledge and skill in the use of alternative communication devices, modes of communication and appliances that facilitate communication.

8. Understanding of the knowledge, skills, and processes of service delivery and instruction, including:

a. Organization and administration of public school programs to provide services for persons with speech-language disorders; and

b. Services available from related fields for those with communication disorders.

9. Understanding of the knowledge, skills, and processes for educating special populations, including:

a. Historical perspective;

b. Characteristics of learners: developmental and cognitive;

c. Medical aspects;

d. Linguistic/multicultural aspects;

e. Family aspects; and

f. Program evaluation.

10. Understanding of the knowledge, skills, and processes involved in the legal aspects associated with students with disabilities, including:

- a. Legislative and judicial mandates related to special education;
- b. Legal decisions related to persons with disabilities;
- c. Advocacy and self-determination;
- d. Guardianship;
- f. Behavior management; and
- g. Disciplinary practices, policies and procedures, and alternative placements/programs in schools.

11. The ability to understand and manage behavior, including:

- a. Behavior support systems;
- b. Individual planning; and
- c. Research in current practice.

12. Understanding of the current knowledge and scope of the profession and sensitivity to issues of diversity.

13. Completion of 375 clock hours of direct client contact, of which 100 must be in a supervised educational setting and a minimum of 200 clock hours must be in speech-language pathology. These clinical clock hours will be distributed in each of the following areas: diagnosis, management of language disorders, management of voice disorders, management of articulation disorders, management of fluency disorders, and audiology.

C. Endorsement requirements. The candidate must have:

- 1. An earned master's degree in speech-language pathology from an accredited institution; or
- 2. A current license in speech pathology issued by the Virginia Board of Examiners for Audiology and Speech Pathology.

8VAC20-21-460. Special education visual impairments preK-12.

A. The program in special education visual impairments preK-12 is designed to ensure through course work and field

experiences in a variety of settings that the candidate has demonstrated the following competencies:

1. Understanding of the characteristics of individuals with disabilities, including:

a. Characteristics of children and youth with disabilities: developmental and cognitive;

b. Language development and the effects of disabling conditions and cultural diversity on language development; and

c. Characteristics of individuals with visual impairments, including impact of visual impairment on infants' and children's growth and development, child and adolescent emotional and social development, and family interaction patterns.

2. Understanding of the foundation of the legal aspects associated with students with disabilities and students with visual impairments, including:

a. Legislative and judicial mandates related to education and special education;

b. The Individuals with Disabilities Education Act (IDEA), §504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act;

c. Legal decisions related to persons with disabilities;

d. Current regulations and procedures governing special education, including individualized education program (IEP) development, individualized family service plan (IFSP), and transition services; and

e. Disciplinary practices, policies and procedures and alternative placements/programs in schools.

3. Understanding of the foundation of assessment and evaluation with an emphasis on individuals with visual impairments, including:

a. Administering, scoring, and interpreting assessments, including norm-referenced, criterion-referenced, and curriculum-based individual and group assessments;

b. Interpreting assessments for eligibility, placement, and program uses;

c. Techniques to collect, record and analyze information;

d. Diagnostic instruction using assessment data;

e. Techniques for recognizing capacity and diversity and its influence on student assessment and evaluation;

- f. Using data from student program evaluation; and
  - g. Low vision practices and procedures which include assessment and instructional programming for functional vision.
4. Understanding of service delivery, classroom management, and instruction, including:
- a. The application of current research;
  - b. Classroom organization and curriculum development;
  - c. Curriculum adaptations and accommodations;
  - d. The development of language/literacy skills;
  - e. The use of technology;
  - f. Classroom management, including behavior support systems and individual planning;
  - g. Methods and procedures for teaching students with visual impairments;
  - h. Instructional programming and modifications of curriculum to facilitate integration of students with disabilities programs and services with peers without disabilities;
  - i. Individual and group behavior management techniques;
  - j. Career and vocational aspects of individuals with disabilities, including persons with visual impairments, in society, including knowledge of careers, vocational opportunities, and transition from school to work; and
  - k. Social and recreational skills and resources for individuals with visual impairments, including methods and materials for assessing and teaching activities of daily living.
5. Understanding of consultation, case management, and collaboration including:
- a. Coordinating service delivery with other professionals in collaborative work environments;
  - b. Training, managing, and monitoring paraprofessionals;
  - c. Involving families in the education of their children with disabilities; and
  - d. Interfacing with community agencies and resources.
6. Understanding of the foundations of Braille reading and writing, including:

a. Teaching reading and writing of grade 2 Braille on both a Braille writer and a "slate and stylus"; and

b. Knowledge of other codes, including Nemeth, music code, and computer Braille.

7. Understanding of anatomy, physiology, and diseases of the eye and the educational implications.

8. Understanding of the standards of professionalism.

9. Completion of supervised classroom experiences at the elementary and secondary levels with students who have visual impairments.

B. Endorsement requirements. The candidate must have:

1. Graduated from an approved teacher preparation program in special education visual impairments preK-12; or

2. Completed a major in special education visual impairments or 27 semester hours in education of students with visual impairments, including at least one course in foundations/legal aspects of special education; characteristics of persons with visual impairments; psychoeducational assessment and assessment for visual impairment; language/literacy skill development; Braille reading and writing; behavior management; transition; consultation; anatomy, physiology, and diseases of the eye; and instructional programming and methods, consistent with the above competencies.

8VAC20-21-470. Speech communication (add-on endorsement).

A. The program in speech communication will ensure that the candidate has demonstrated the following competencies:

1. Understanding and knowledge of oral communication, including language acquisition involving the processes of expressive and receptive language and voice production involving the aesthetics of speech;

2. Understanding and knowledge of common speech production patterns, including articulation, pronunciation, and dialectical variances as these relate to standard English patterns;

3. Understanding of and proficiency in effective communication, including interpersonal communication, the art of persuasion, oral interpretation, group discussion, mass communication, public speaking, and debate; and the ability to critique such communication interactions;

4. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

B. Endorsement requirements. The candidate must have:

1. A baccalaureate degree and an endorsement in a teaching area; and
2. A minimum of 15 semester hours in speech communication.

8VAC20-21-480. Theater arts preK-12.

A. The program in theater arts preK-12 will ensure that the candidate has demonstrated the following competencies:

1. Understanding of the knowledge, skills, and processes of the theater discipline as defined in the Virginia Standards of Learning and how these provide a necessary foundation integral to teaching theater.
2. Understanding of the knowledge, skills and processes for teaching theater to the developmental levels of students in preK-12, including the following:
  - a. Experience in planning, developing, administering, and evaluating a program of theater education;
  - b. Directing;
  - c. Technical theater, including lighting, set design, stage craft, costuming, makeup, and safety;
  - d. Performance, including acting and acting styles;
  - e. Dramatic literature;
  - f. The relationship of theater and culture and the influence of theater on past and present cultures, including the history of theater; and
  - g. Related areas of theater, such as art, dance, and music.
3. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

B. Endorsement requirements. The candidate must have:

1. Graduated from an approved teacher preparation program in theater arts; or
2. Completed a major in theater or 33 semester hours distributed among the following areas:

- a. Directing: 6 semester hours;
- b. Technical theater: 9 semester hours;
- c. Theater history: 3 semester hours;
- d. Performance: 6 semester hours; and
- e. Dramatic literature: 9 semester hours.

C. Add-on endorsement requirements in theater arts preK-12. The candidate must have:

- 1. A baccalaureate degree and an endorsement in any teaching area; and
- 2. Completed 15 semester hours distributed in the following areas:
  - a. Directing: 3 semester hours;
  - b. Technical theater: 3 semester hours;
  - c. Theater history: 3 semester hours; and
  - d. Performance: 6 semester hours.

8VAC20-21-490. Vocational education--agricultural education.

A. The program in agricultural education will ensure that the candidate has demonstrated the following competencies:

- 1. Understanding of the importance and relationship of agriculture to the economy of the community, the state, and the nation, including:
  - a. An awareness and appreciation for agriculture;
  - b. Knowledge of the occupational opportunities in agriculture and related fields;
  - c. Knowledge of the U.S. food and fiber system; and
  - d. Knowledge of the contributions of agriculture to the economy of the state and nation.
- 2. Understanding of the knowledge, skills, and processes involved in plant and soil sciences, including:
  - a. Production, use, and marketing of row crops, specialty crops, forage crops, fruits, small grains, vegetables, and cereal crops; and

b. Soil and water management.

3. Understanding of the knowledge, skills, and processes involved in the production, management, and marketing of animals, including:

a. Production of cattle, swine, poultry, dairy cows, sheep, aquaculture species, goats, and horses; and

b. Care and management of small companion animals.

4. Understanding of the knowledge, skills, and processes involved in agricultural mechanics, including:

a. Safe operation, repair, and maintenance of equipment, tools, and machinery used in agriculture;

b. Setting up and adjusting agriculture machinery;

c. Basic knowledge of a set of hand tools, measuring devices, and testing equipment used in agriculture;

d. Basic knowledge of energy transfer systems used in agriculture; and

e. Properties of metals used in tools and equipment.

5. Understanding of agricultural economics, including the various markets, international trade, government policies, and the operation and management of various agricultural businesses.

6. Understanding of the knowledge, skills, and processes involved in natural resources, including:

a. Care, management, and conservation of soil, air, water, and wildlife; and

b. Production and management of the forest.

7. Understanding of the importance and processes necessary for community resource development, including:

a. Fundamentals of the community development process;

b. Knowledge of public and private programs and resources available;

c. Knowledge of the promotion of community development; and

d. Knowledge of civic organizations and their purposes.

8. Knowledge of and the ability to teach:

a. How the biological, physical, and applied sciences relate to practical solutions of agricultural problems;

b. Leadership development skills; and

c. Agricultural competencies needed by secondary students to be successful in continuing their education and entering a related occupation.

9. Knowledge and skills necessary to teach leadership skills, organize and manage an effective co-curricular student organization (FFA) and implement the organization's activities as an integral part of instruction.

10. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

B. Endorsement requirements. The candidate must have:

1. Graduated from an approved teacher preparation program in agricultural education; or

2. Completed a major in agricultural education or 39 semester hours of course work in agriculture, including at least 3 semester hours in each of the following:

a. Plant science;

b. Animal science;

c. Agricultural mechanics;

d. Agricultural economics and management;

e. Forestry/wildlife management;

f. Horticulture; and

g. Technology/microcomputer applications.

C. Technical Professional License. An endorsement in horticulture or agricultural machinery may be granted to individuals who have:

1. Been recommended by an employing Virginia educational agency;

2. Completed four years of occupational experience in the area sought; and

3. Completed professional studies requirements (human growth and development: 3 semester hours; curriculum and instructional procedures in vocational education: 3 semester hours; and applications of instructional technology or foundations of education: 3 semester hours). The professional studies requirements may be met under a Provisional License.

8VAC20-21-500. Vocational education--business education.

A. The program in business education will ensure that the candidate has demonstrated the following competencies:

1. Knowledge, skills, and principles of manual and automated accounting, including:

a. Accounting concepts, terminology, and applications;

b. Accounting systems; and

c. The basic accounting cycle of source documents, verifications, analyzing, recording, posting, trial balances, and preparing financial statements.

2. Knowledge and skills necessary to:

a. Communicate basic economic principles as applied to the American economic system; and

b. Apply basic economic principles to consumerism.

3. Knowledge and skills in the foundations of business selected from the following areas:

a. Business law.

(1) Ability to recognize the legal requirements affecting business organization; and

(2) Ability to apply legal principles to business situations;

b. Business principles.

(1) Ability to identify, explain, and apply contemporary business principles; and

(2) Ability to identify and explain the advantages and disadvantages of various business organizational structures;

c. Management. Understanding of basic management concepts and leadership styles to explore and solve problems in business functions, economics, international business, and human relations issues;

d. Marketing.

(1) Understanding of basic marketing concepts in sales techniques, advertising, display, buying, wholesale/retail, distribution, service occupations, market analysis, warehousing, and inventory control; and

(2) Understanding of the unique characteristics of an entrepreneur and the knowledge and skills necessary for an entrepreneurial venture;

e. Finance.

(1) Knowledgeable about and skilled in the areas of money management, recordkeeping, and banking needed for sound financial decision making; and

(2) Understanding of the basic concepts of economics, insurance, credit, and other related topics; or

f. Insurance. Understanding of the purpose of insurance, types of property losses, types of risk insurance protection, insurance for specific business activities, and noninsurable risks.

4. Knowledge and skills in all of the following communications and information technologies:

a. Communications.

(1) Ability to communicate in a clear, courteous, concise, and correct manner for personal and professional purposes through the foundations of listening, writing, reading, speaking, non-verbal cues, and following written/oral directions; and

(2) Ability to use technology to expedite and enhance the effectiveness of communications and telecommunications.

b. Business systems. Ability to use current and emerging business systems and procedures to diagnose/solve problems in office procedures and management, including workflow topics, accessing references, records management, recordkeeping managing travel and meetings, handling mail, and transcription of voice-dictated and voice-recorded dictation.

c. Computer applications.

(1) Ability to identify, select, evaluate, use, install, upgrade, and customize application software;

(2) Ability to diagnose and solve problems in word processing, database, spreadsheet, graphics, desktop/presentation/multimedia and imaging, and emerging computer applications; and

(3) Ability to integrate the applications.

d. Word processing and information systems.

(1) Ability to use word processing applications software to create, modify, and print personal, educational, and business documents, and import other applications to word processing documents;

(2) Ability to identify, select, evaluate, use, install, upgrade, customize, and diagnose and solve problems with various types of operating systems, environments, and utilities; and

(3) Ability to compare, evaluate, and demonstrate skills in the use of programming languages.

e. Keyboarding.

(1) Possession of skills in fingering and keyboard manipulation techniques to model and provide touch keyboarding instruction;

(2) Ability to provide instruction that allows students to develop touch fingering techniques in a kinesthetic response to the keyboard required for rapid, accurate entry of data and information; and

(3) Ability to provide instruction for current procedures in formatting documents.

5. Experience in a supervised business career through cooperative education, internship, shadowing, mentorship, and/or work experience.

6. Knowledge and skills necessary to teach leadership skills, organize and manage an effective co-curricular student organization and implement the organization's activities as an integral part of instruction.

7. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

B. Endorsement requirements. The candidate must have:

1. Graduated from an approved teacher preparation program in business education; or

2. Completed 39 hours of course work in business, including:

a. Accounting: 6 semester hours;

- b. Economics: 3 semester hours;
- c. Business law, business principles, management, marketing, finance, or insurance: 12 semester hours;
- d. Communications: 3 semester hours;
- e. Business systems and procedures: 3 semester hours;
- f. Computer applications: 3 semester hours;
- g. Word processing and information systems: 3 semester hours;
- h. Keyboarding: 3 semester hours; and
- i. Supervised business experience: 3 semester hours.

C. Technical Professional License. An endorsement in a specialized business area, such as medical office procedures, legal office procedures, and network administration, may be granted to individuals who have:

- 1. Been recommended by an employing Virginia educational agency;
- 2. Completed two years of occupational experience in the endorsement area sought;
- 3. Completed a business program equivalent to a two-year associate degree in the area sought; and
- 4. Completed professional studies requirements (human growth and development: 3 semester hours; curriculum and instructional procedures in vocational education: 3 semester hours; and applications of instructional technology or foundations of education: 3 semester hours). The professional studies requirements may be met under a Provisional License.

8VAC20-21-510. Vocational education--health occupations education.

A. The program in health occupations education will ensure that the candidate has demonstrated the following competencies:

- 1. Knowledge of teaching methods.
  - a. Instructional planning--ability to determine the needs and interests of students;
  - b. Organizing instruction--ability to prepare teacher-made instructional materials for clinical laboratory experience;

c. Instructional execution--ability to use techniques for simulating patient care and demonstrating manipulative skills;

d. Application of technology in the classroom; and

e. Instructional evaluation--ability to determine grades for students in classroom and clinical settings.

2. Knowledge of program management.

a. Planning--ability to organize an occupational advisory committee;

b. Curriculum development--ability to keep informed of current curriculum content and patient care practices;

c. Planning and organizing teaching/occupational laboratory for laboratory simulations/demonstrations;

d. Understanding of the process for issuing credentials for health workers;

e. Understanding of the health care industry; and

f. Evaluation--ability to conduct a student follow-up study.

3. Knowledge and skills necessary to teach leadership skills, organize and manage an effective co-curricular student organization and implement the organization's activities as an integral part of instruction.

4. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

B. Endorsement requirements.

1. The candidate must have:

a. Graduated from an approved program of study for the preparation of health care professionals;

b. A license or be certified as a professional practitioner in the area in which one is to be teaching; and

c. Completed two years of occupational experience in an area related to the area to be taught.

2. Technical Professional License. An endorsement in a specialized health occupations area may be granted to individuals who have:

- a. Been recommended by an employing Virginia educational agency;
- b. A license or be certified as a professional practitioner in the area in which one is to be teaching;
- c. Completed two years of occupational experience in the area sought;
- d. Completed a health occupations' certificate or associate degree program; and
- e. Completed professional studies requirements (human growth and development: 3 semester hours; curriculum and instructional procedures in vocational education: 3 semester hours; and applications of instructional technology or foundations of education: 3 semester hours). The professional studies requirements may be met under a Provisional License.

8VAC20-21-520. Vocational education--industrial cooperative training (add-on endorsement).

A. The program in industrial cooperative training (ICT) will ensure that the candidate has demonstrated the following competencies:

1. Understanding of industrial education and its role in the development of technically competent, socially responsible, and culturally sensitive individuals with potential for leadership in skilled technical work and professional studies;
2. Understanding of and the ability to relate experiences designed to develop skills in the interpretation and implementation of industrial education philosophy in accordance with changing demand;
3. The knowledge and experience of systematically planning, executing, and evaluating individual and group instruction;
4. Understanding of the competencies necessary for effective organization and management of laboratory instruction;
5. Understanding of the competencies necessary for making physical, social, and emotional adjustments in multicultural student-teacher relationships;
6. Understanding of the competencies necessary for developing and utilizing systematic methods and instruments for appraising and recording student progress in the vocational classroom;

7. Understanding of the ability to provide technical work experience through cooperative education or provide a method of evaluating previous occupational experience commensurate with the minimum required standard;
8. Understanding of the competencies necessary to assist students in job placement and in bridging the gap between education and work;
9. Understanding of the awareness of the human relations factor in industry with emphasis on the area of cooperation among labor, management, and the schools;
10. Understanding of the teacher's role in the school and community;
11. Understanding of the content, skills, and techniques necessary to teach a particular trade area;
12. Understanding of the competencies necessary to organize and manage an effective student organization; and
13. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

B. Endorsement requirements.

1. The candidate must have graduated from an approved teacher preparation program in industrial cooperative training (ICT); or
2. The candidate must have:
  - a. A Virginia Collegiate Professional or Postgraduate Professional License;
  - b. Completed two years or more of successful, full-time teaching experience;
  - c. Completed 15 semester hours in trade and industrial education course work distributed in the following areas:
    - (1) Administration and coordination of ICT or equivalent cooperative education course;
    - (2) Methods and development of competency-based related instructional materials for ICT;
    - (3) Vocational student organizations;
    - (4) Implementation of a competency-based (CBE) curriculum; and
    - (5) Development and utilization of directly related occupational materials; and

d. In the area of occupational experience, evidence of a minimum of two years or 4,000 hours of acceptable employment in a trade, technical, or industrial education subject area.

8VAC20-21-530. Vocational education--marketing education.

A. The program in marketing education will ensure that the candidate has demonstrated the following competencies:

1. Knowledge of marketing, merchandising, marketing mathematics, communication theory and techniques, advertising and sales promotion, personal selling, and management through a variety of educational and work experiences;
2. Knowledge of planning, developing, and administering a comprehensive program of marketing education for high school students and adults;
3. Knowledge of organizing and using a variety of instructional methods and techniques for teaching youths and adults;
4. Knowledge of conducting learning programs that include a variety of career objectives and recognize and respond to individual differences in students;
5. Knowledge of assisting learners of different abilities in developing skills needed to qualify for further education and employment;
6. Knowledge of acquiring knowledge of career requirements and opportunities in marketing, merchandising, and management;
7. Knowledge and skills necessary to teach leadership skills, organize and manage an effective co-curricular student organization and implement the organization's activities as an integral part of instruction;
8. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing; and
9. Knowledge of utilizing current technological applications as these relate to marketing functions.

B. Endorsement requirements. The candidate must have:

1. Graduated from an approved teacher preparation program in marketing education; or
2. Completed the following educational and occupational requirements:
  - a. Thirty semester hours of course work distributed in the following areas: marketing process and management, economics, merchandising and operations, advertising/sales promotion, personal selling, marketing math, communication theory and techniques,

business ethics, human resources/training and development, international business/marketing, or marketing technology; and

b. A minimum of 1,000 clock hours in a marketing occupation within the last five years, 500 hours of which must have been university-supervised or the applicant whose baccalaureate degree is in an area other than marketing education must have completed a minimum of 4,000 clock-hours of occupational experience within the last five years in one or more marketing occupations.

C. Technical Professional License. An endorsement in a specialized marketing area, such as apparel and accessories, financial services, hotel/motel operations, international marketing, real estate, or restaurant, may be granted to individuals who have:

1. Been recommended by an employing Virginia educational agency;
2. A license or are certified as a professional practitioner in the area in which one is to be teaching;
3. Completed a registered apprenticeship program and two years of satisfactory experience at the journeyman level or an equivalent level in the trade;
4. Completed four years of work experience at the management or supervisory level or equivalent or have a combination of four years of training and work experience at the management or supervisory level or equivalent; and
5. Completed professional studies requirements (human growth and development: 3 semester hours; curriculum and instructional procedures in vocational education: 3 semester hours; and applications of instructional technology or foundations of education: 3 semester hours). The professional studies requirements may be met under a Provisional License.

8VAC20-21-540. Vocational education--technology education.

A. The program in technology education will ensure that the candidate has demonstrated the following competencies:

1. Understanding and utilization of technology, including the human activities of:
  - a. Designing and developing technological systems;
  - b. Determining and controlling the behavior of technological systems;
  - c. Utilizing technological systems; and
  - d. Assessing the impacts and consequences of technological systems.

2. Understanding of technological knowledge, including:
  - a. The nature and evolution of technology;
  - b. Technological concepts and principles; and
  - c. Technological resources, impacts, consequences, and linkages with other fields.
3. Understanding and utilization of the major systems of technology, including the:
  - a. Synthesis of the processes for creating, encoding, transmitting, receiving, decoding, storage, and retrieval of information using communication systems in a global information society;
  - b. Application of the principles and processes characteristic of contemporary and future production systems, including the research, engineering design and testing, planning, organization, resources, and distribution; and
  - c. Integration and organization of transportation systems, including land, sea, air, and space as a means of transporting people, goods, and services in a global economy.
4. Understanding and utilization of the knowledge, skills, and processes for teaching in a laboratory environment, including:
  - a. Laboratory safety rules, regulations, processes and procedures;
  - b. Ability to organize technological content into effective instructional units;
  - c. Ability to deliver instruction to diverse learners;
  - d. Ability to evaluate student achievement, curriculum materials and instructional processes;
  - e. Ability to incorporate new and emerging instructional technologies to enhance student performance; and
  - f. Understanding the concepts and procedures for developing a learner's technological literacy.
5. Knowledge and skills necessary to teach leadership skills, organize and manage an effective co-curricular student organization and implement the organization's activities as an integral part of instruction;
6. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

B. Endorsement requirements. The candidate must have:

1. Graduated from an approved teacher preparation program in technology education;
2. Completed a major in technology education or 39 semester hours in technology education distributed in the following areas:
  - a. Technology and culture (experiences shall include the historical development of technology and its present and future impact on the individual, society and the environment): 6 semester hours;
  - b. Technological foundations (experiences shall include technical design and illustration, energy and power, electronics, and materials science): 12 semester hours;
  - c. Technological processes (experiences shall include technical design, material processing, manufacturing, construction, and graphic communication): 12 semester hours; and
  - d. Technological systems (experiences shall include communication, production, and transportation systems): 9 semester hours; or
3. Earned a baccalaureate degree from an accredited college or university with a major in one of the following fields of study: architecture, design, engineering, or physics; and completed 18 semester hours of technology education content course work, including at least 3 semester hours in each of the following areas: technology and culture, technological foundations, technological processes, and technological systems.

8VAC20-21-550. Vocational education--trade and industrial education.

A. The program in trade and industrial education will ensure that the candidate has demonstrated the following competencies:

1. Understanding of industrial education and its role in the development of technically competent, socially responsible, and culturally sensitive individuals with potential for leadership in skilled technical work and/or professional studies;
2. Understanding of and the ability to relate experiences designed to develop skills in the interpretation and implementation of industrial education philosophy in accordance with changing demand;
3. The knowledge and experience of systematically planning, executing, and evaluating individual and group instruction;
4. Knowledge of the competencies necessary for effective organization and management of laboratory instruction;

5. Knowledge of the competencies necessary for making physical, social, and emotional adjustments in multicultural student-teacher relationships;

6. Knowledge of the competencies necessary for developing and utilizing systematic methods and instruments for appraising and recording student progress in the vocational classroom;

7. Knowledge of the ability to provide technical work experience through cooperative education or provide a method of evaluating previous occupational experience commensurate with the minimum required standard;

8. Knowledge of the competencies necessary to assist students in job placement and in otherwise bridging the gap between education and work;

9. Understanding of the awareness of the human relations factor in industry, with emphasis on the area of cooperation among labor, management, and the schools;

10. Knowledge of the teacher's role in the school and community;

11. Understanding of the content, skills, and techniques necessary to teach a particular trade area;

12. Knowledge of the competencies necessary to organize and manage an effective student organization; and

13. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

**B. Endorsement requirements.**

1. The candidate must have graduated from an approved teacher preparation program in the trade and industrial education program subject area for which the candidate is seeking endorsement; or

2. A candidate who has graduated from an approved teacher preparation program that is not in the trade and industrial education program subject area for which the candidate is seeking endorsement must have:

a. A current state licensure or industry certification based upon the prescribed standard or examination, if applicable; and

b. Evidence of at least two years or 4,000 clock hours of satisfactory occupational experience within the past five years in the teaching specialty for which they are seeking endorsement. A candidate whose occupational experience has not been within the last five years must participate in a supervised technical update related to the teaching

specialty or area of endorsement or complete a supervised internship of work experience of not less than six weeks related to the area of endorsement or teaching specialty.

3. Technical Professional License. An endorsement in a specialized trade and industrial education area will be granted to individuals who have:

- a. Been recommended by an employing Virginia educational agency;
- b. A license or are certified as a professional practitioner in the area in which one is to be teaching, if applicable, or can demonstrate competency in the area of trade and industrial education one is to be teaching;
- c. Evidence of at least two years or 4,000 clock hours of satisfactory occupational experience within the past five years in the teaching specialty for which they are seeking endorsement. Candidates whose occupational experience has not been within the last five years must participate in a supervised technical update related to the teaching specialty or area of endorsement or complete a supervised internship of work experience of not less than six weeks related to the area of endorsement or teaching specialty; and
- d. Completed professional studies requirements (human growth and development: 3 semester hours; curriculum and instructional procedures in vocational education: 3 semester hours; and applications of instructional technology or foundations of education: 3 semester hours). The professional studies requirements may be met under a Provisional License.

C. Add-on endorsement requirements. A candidate must:

1. Hold a Collegiate Professional or Postgraduate Professional License with a teaching endorsement;
2. Demonstrate competency in the trade or technology to be taught;
3. Hold licensure for the trade or industrial area for which endorsement is sought based upon the prescribed standard or examination;
4. Have completed two years or 4,000 clock hours of satisfactory, full-time employment experience at the journeyman level or an equivalent level in the occupation within the last five years. Candidates whose occupational experience has not been within the last five years must participate in a supervised technical update related to the teaching specialty or area of endorsement or complete a supervised internship of work experience of not less than six weeks related to the area of endorsement or teaching specialty; and
5. Have completed 3 semester hours in curriculum and instructional procedures specific to vocational industrial education.

8VAC20-21-560. Vocational education--vocational special needs (add-on endorsement).

A. The program in vocational special needs (add-on endorsement) will ensure that the candidate has demonstrated the following competencies:

1. Understanding of vocational special needs programs and services; characteristics of students who are disadvantaged, disabled, and gifted; and program development, implementation, and evaluation.
2. Understanding of instructional methods and resources in career-vocational, community-based, and transition programs for targeted populations in vocational education, including:
  - a. Use of learning and teaching styles to plan and deliver instruction;
  - b. Use of vocational assessment results to plan individual instruction strategies;
  - c. Ability to plan and manage a competency-based education system;
  - d. Ability to adapt curriculum materials to meet special student needs;
  - e. Use of a variety of classroom management techniques to develop an enhanced learning environment;
  - f. Use of different processes to improve collaboration with colleagues, parents, and the community; and
  - g. Ability to plan learning experiences that prepare individuals for transition to more advanced education and career development options.
3. Understanding of the planning, delivery, and management of work-based education programs such as community surveying, cooperative education, simulation, directed observation, shadowing, mentoring, and internship.
4. Understanding of strategies for enabling students to learn all aspects of particular industries --planning, management, finances, technical and production skills, labor and community issues, health and safety, environmental issues, and the technology associated with the specific industry.
5. Understanding of career/life planning procedures, transitioning processes and procedures, and career-search techniques.
6. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

B. Endorsement requirements.

1. The candidate must have graduated from an approved teacher preparation program in vocational special needs; or
2. The candidate must have:
  - a. A baccalaureate degree with an endorsement in one area of vocational education or special education preK-12;
  - b. Twelve semester hours distributed in the following areas:
    - (1) Overview of vocational special needs programs and services: 3 semester hours;
    - (2) Instructional methods, curriculum and resources: 3 semester hours;
    - (3) Career/life planning, transitioning, occupational information, and delivery of cooperative education programs: 3 semester hours; and
    - (4) Purposes and practices and characteristics of special populations: 3 semester hours; and
  - c. Evidence of at least two years or 4,000 clock hours of satisfactory occupational experience in business or industry, or both, or complete a work experience internship under the supervision of an institution of higher education.

8VAC20-21-570. Vocational education--work and family studies.

A. The program in work and family studies will ensure that the candidate has demonstrated the following competencies:

1. Knowledge of the developmental processes of childhood, preadolescence, adolescence, and adulthood/aging and in creating and maintaining an environment in which family members develop and interact as individuals and as members of a group;
2. Knowledge of the decision-making processes related to housing, furnishings, and equipment for individuals and families with attention given to special needs and the diversity of individuals;
3. The ability to plan, purchase, and prepare food choices that promote nutrition and wellness;
4. Knowledge of the management of resources to achieve individual and family goals at different stages of the life span;
5. Knowledge of the sociological, psychological, and physiological aspects of clothing and textiles for individuals and families;

6. Knowledge of the management of families, work, and their inter-relationships;
7. Knowledge of occupational skill development and career planning;
8. Knowledge of the use of critical science and creative skills to address problems in diverse family, community, and work environments;
9. Knowledge and skills necessary to teach leadership skills, organize and manage an effective co-curricular student organization and implement the organization's activities as an integral part of instruction;
10. The ability to plan, develop, teach, supervise, and evaluate programs in occupational programs at the secondary, postsecondary, and adult levels;
11. The ability to organize and implement Future Homemakers of America/Home Economics Related Occupations (FHA/HERO) programs as an integral part of classroom instruction; and
12. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

B. Endorsement requirements. The candidate must have:

1. Graduated from an approved teacher preparation program in work and family studies;  
or
2. Completed 39 semester hours of course work distributed in the following areas:
  - a. Development of individual and family: 9 semester hours;
  - b. Management, family finance, and consumer economics: 6 semester hours;
  - c. Food and nutrition: 6 semester hours;
  - d. Housing, home furnishing, and equipment: 6 semester hours;
  - e. Clothing and textiles: 3 semester hours;
  - f. Health: 3 semester hours;
  - g. Occupational program management: 3 semester hours; and
  - h. Documented work experience related to work and family studies: 3 semester hours.
3. Technical Professional License. An endorsement in a specialized work and family studies area, such as child care occupations, consumer services, family and human

services, fashion design occupations, food occupations, hospitality occupations, interior design occupations, and home furnishings occupations, and home and institutional services, may be granted to individuals who have:

- a. Been recommended by an employing Virginia educational agency;
- b. A license or are certified as a professional practitioner in the area in which one is to be teaching, if applicable, or demonstrate competency in the specialized area of work and family studies;
- c. In the area of occupational experience, evidence of at least two years or 4,000 clock hours of satisfactory occupational experience within the past five years in the teaching specialty for which they are seeking endorsement.
- d. Completed professional studies requirements (human growth and development: 3 semester hours; curriculum and instructional procedures in vocational education: 3 semester hours; and applications of instructional technology or foundations of education: 3 semester hours). The professional studies requirements may be met under a Provisional License.

## Part VI Licensure Regulations Governing Support Personnel

8VAC20-21-580. Administration and supervision preK-12.

A. An individual may become eligible for an endorsement in administration and supervision preK-12 by completing the requirements in one of the options described in this section.

B. Virginia's approved program. The candidate must have:

1. A master's degree from an accredited college or university.
2. Completed three years of successful, full-time experience as a classroom teacher in an accredited nonpublic or public school.
3. Completed an approved administration and supervision program in Virginia which shall ensure that the candidate has demonstrated the following competencies:
  - a. Knowledge and understanding of student growth and development, including:
    - (1) Applied learning and motivational theories;
    - (2) Curriculum design, implementation, evaluation and refinement;

(3) Principles of effective instruction, measurement, evaluation and assessment strategies;

(4) Diversity and its meaning for educational programs; and

(5) The role of technology in promoting student learning.

b. Knowledge and understanding of systems and organizations, including:

(1) Systems theory and the change process of systems, organizations and individuals;

(2) The principles of developing and implementing strategic plans;

(3) Information sources and processing, including data collection and data analysis strategies;

(4) Learning goals in a pluralistic society; and

(5) Effective communication, including consensus building and negotiation skills.

c. Knowledge and understanding of theories, models, and principles of organizational development, including:

(1) Operational procedures at the school and division/district level;

(2) Principles and issues of school safety and security;

(3) Human resources management and development, including adult learning and professional development models;

(4) Principles and issues related to fiscal operations of school management;

(5) Principles and issues related to school facilities and use of space;

(6) Legal issues impacting school operations and management; and

(7) Technologies that support management functions.

d. Knowledge and understanding of the conditions and dynamics of the diverse school community, including:

(1) Emerging issues and trends that impact the school community;

(2) Community resources and partnerships of school, family, business, government and higher education institutions; and

(3) Community relations and marketing strategies and processes.

e. Knowledge and understanding of the purpose of education and its role in a modern society, including:

- (1) The philosophy and history of education;
- (2) Various ethical frameworks and professional ethics;
- (3) The value of the diverse school community; and
- (4) The role of leadership in modern society.

f. Knowledge and understanding of principles of representative governance that undergird the system of American schools, including:

- (1) The role of public education in developing and renewing a democratic society and an economically productive nation;
- (2) The law as related to education and schooling;
- (3) The political, social, cultural and economic systems and processes that impact schools;
- (4) Models and strategies of change and conflict resolution as applied to the larger political, social, cultural and economic contexts of schooling;
- (5) Global issues and forces affecting teaching and learning; and
- (6) The importance of diversity and equity in a democratic society.

4. Completed a beginning administration and supervision assessment when prescribed by the Board of Education reflecting the knowledge and understanding of the stated competencies or completed a full-time internship as a school principal. One year of successful, full-time experience as an assistant principal or principal in an accredited public or nonpublic school may be accepted instead of the internship.

C. Out-of-state approved program in administration and supervision. The candidate must have:

1. A master's degree from an accredited college or university;
2. Completed three years of successful, full-time experience as a classroom teacher in an accredited nonpublic or public school;
3. Completed an out-of-state approved program in administration and supervision; and

4. Completed a beginning administration and supervision assessment when prescribed by the Board of Education reflecting the knowledge and understanding of the stated competencies or completed a full-time internship as a school principal. One year of successful, full-time experience as an assistant principal or principal in an accredited public or nonpublic school may be accepted instead of the internship.

D. Out-of-state administration and supervision license. The candidate must:

1. Hold a master's degree from an accredited college or university;
2. Hold a current, valid out-of-state license (full credential with endorsements in administration and supervision); and
3. Have completed a beginning administration and supervision assessment when prescribed by the Board of Education reflecting the knowledge and understanding of the stated competencies or completed a full-time internship as a school principal. One year of successful, full-time experience as an assistant principal or principal in an accredited public or nonpublic school may be accepted instead of the internship.

8VAC20-21-590. Division Superintendent License.

An individual may be a candidate for the list of eligible division superintendents and the renewable Division Superintendent License through the completion of the requirements in one of the following three options:

1. Option one. The individual must:
  - a. Hold an earned doctorate degree in educational administration or educational leadership from an accredited institution; and
  - b. Have completed five years of educational experience in a public and/or accredited nonpublic school, two of which must be teaching experience at the preK-12 level and two of which must be in administration/supervision at the preK-12 level.
2. Option two. The individual must:
  - a. Hold an earned master's degree from an accredited institution plus 30 completed hours beyond the master's degree;
  - b. Have completed requirements for administration and supervision preK-12 endorsement which includes the demonstration of competencies in the following areas:
    - (1) Knowledge and understanding of student growth and development, including:
      - (a) Applied learning and motivational theories;

- (b) Curriculum design, implementation, evaluation and refinement;
  - (c) Principles of effective instruction, measurement, evaluation and assessment strategies;
  - (d) Diversity and its meaning for educational programs; and
  - (e) The role of technology in promoting student learning.
- (2) Knowledge and understanding of systems and organizations, including:
- (a) Systems theory and the change process of systems, organizations and individuals;
  - (b) The principles of developing and implementing strategic plans;
  - (c) Information sources and processing, including data collection and data analysis strategies;
  - (d) Learning goals in a pluralistic society; and
  - (e) Effective communication, including consensus building and negotiation skills.
- (3) Knowledge and understanding of theories, models, and principles of organizational development, including:
- (a) Operational procedures at the school and division/district level;
  - (b) Principles and issues of school safety and security;
  - (c) Human resources management and development, including adult learning and professional development models;
  - (d) Principles and issues related to fiscal operations of school management;
  - (e) Principles and issues related to school facilities and use of space;
  - (f) Legal issues impacting school operations and management; and
  - (g) Technologies that support management functions.
- (4) Knowledge and understanding of the values and ethics of leadership, including:
- (a) The role of leadership in modern society;
  - (b) Emerging issues and trends that impact the school community;

(c) Community resources and partnerships of school, family, business, government and higher education institutions;

(d) Community relations and marketing strategies and processes; and

(e) Conditions and dynamics of the diverse school community.

(5) Knowledge and understanding of the purpose of education and its role in a modern society, including:

(a) The philosophy and history of education; and

(b) Various ethical frameworks and professional ethics.

(6) Knowledge and understanding of principles of representative governance that undergird the system of American schools, including:

(a) The role of public education in developing and renewing a democratic society and an economically productive nation;

(b) The law as related to education and schooling;

(c) The political, social, cultural and economic systems and processes that impact schools;

(d) Models and strategies of change and conflict resolution as applied to the larger political, social, cultural and economic contexts of schooling;

(e) Global issues and forces affecting teaching and learning; and

(f) The importance of diversity and equity in a democratic society.

c. Have completed five years of educational experience in a public and/or accredited nonpublic school, two of which must be teaching experience at the preK-12 level and two of which must be in administration/supervision at the preK-12 level.

3. Option three. The individual must:

a. Hold an earned master's degree from an accredited institution;

b. Hold a current, valid out-of-state license with an endorsement as a division/district superintendent; and

c. Have completed five years of educational experience in a public and/or accredited nonpublic school, two of which must be teaching experience at the preK-12 level and two of which must be in administration/supervision.

8VAC20-21-600. Reading specialist.

A. The reading specialist program will ensure that the candidate has demonstrated the following competencies:

1. Assessment and diagnostic teaching. The candidate must:

a. Demonstrate expertise in the use of assessment and screening measures (formal and informal) for language proficiency, concepts of print, phoneme awareness, letter recognition, sound-symbol knowledge, single word recognition, decoding, word attack skills, word recognition in context, reading fluency, and oral and silent reading comprehension; and

b. Demonstrate expertise in the ability to use diagnostic data to tailor instruction, and accelerate and remediate using flexible skill-level groupings as necessary.

2. Oral communication. The candidate must:

a. Demonstrate expertise in the knowledge, skills, and processes necessary for teaching oral language (including speaking and listening);

b. Demonstrate expertise in developing students' phonemic awareness/phonological association skills;

c. Demonstrate effective strategies for facilitating the learning of standard English by speakers of other languages and dialects;

d. Demonstrate an understanding of the unique needs of students with language differences and delays; and

e. Demonstrate the ability to promote creative thinking and expression, as through storytelling, drama, choral/oral reading, etc.

3. Reading/literature. The candidate must:

a. Demonstrate an understanding of the role of the family in developing literacy;

b. Demonstrate the ability to create appreciation of the written word and the awareness of the printed language and writing system;

c. Develop an understanding of the linguistic, sociological, cultural, cognitive, and psychological basis of the reading process;

- d. Demonstrate expertise in explicit phonics instruction, including an understanding of sound/symbol relationships, syllables, phonemes, morphemes, decoding skills, and word attack skills;
  - e. Demonstrate expertise in the use of cuing systems of language, including knowledge of how phonics, syntax, and semantics interact as the reader constructs meaning;
  - f. Demonstrate expertise in strategies to increase vocabulary;
  - g. Demonstrate expertise in the structure of the English language, including an understanding of syntax and vocabulary development;
  - h. Demonstrate expertise in reading comprehension strategies, including a repertoire of questioning strategies, understanding the dimensions of word meanings, teaching summarizing and retelling skills, and guiding students to make connections beyond the text.
  - i. Demonstrate expertise in the ability to teach strategies in literal, interpretive, critical, and evaluative comprehension.
  - j. Demonstrate the ability to develop comprehension skills in all content areas;
  - k. Demonstrate the ability to foster appreciation of a variety of literature; and
  - l. Understand the importance of promoting independent reading and reading reflectively by selecting quality literature, including fiction and nonfiction, at appropriate reading levels.
4. Writing. The candidate must:
- a. Demonstrate expertise in the knowledge, skills, and processes necessary for teaching writing, including grammar, punctuation, spelling, syntax, etc.;
  - b. Demonstrate expertise in systematic spelling instruction, including awareness of the purpose and limitations of "invented spelling," the connection between stages of language acquisition and spelling, orthographic patterns, and strategies for promoting generalization of spelling study to writing; and
  - c. Demonstrate the ability to promote creative thinking and expression through imaginative writing, etc.
5. Research. The candidate must demonstrate the ability to guide students in their use of technology for both process and product as they work with reading, writing, and research.
6. Leadership and specialization. The candidate must:

- a. Demonstrate expertise in an understanding of language acquisition;
- b. Demonstrate an understanding of varying degrees of learning disabilities;
- c. Demonstrate an understanding of the needs of high achieving students and of strategies to challenge them at appropriate levels;
- d. Demonstrate an understanding of child psychology, including personality and learning behaviors;
- e. Demonstrate an understanding of the significance of cultural contexts upon language;
- f. Demonstrate expertise with educational measurement and evaluation;
- g. Demonstrate expertise utilizing linguistic skills in diagnoses;
- h. Demonstrate the ability to instruct and advise teachers in the skills necessary to differentiate reading instruction for both low and high achieving readers;
- i. Demonstrate the ability to organize and supervise the reading program within the classroom, school, or division;
- j. Demonstrate effective communication skills in working with a variety of groups, including parents, teachers, administrators, community leaders, etc.; and
- k. Demonstrate knowledge of current research and exemplary practices in English/reading.

B. Endorsement requirements. The candidate must have completed an approved graduate-level reading specialist approved preparation program (master's degree required) that includes course experiences of at least 30 semester hours of graduate course work in the competencies listed, as well as a practicum experience in the diagnosis and remediation of reading difficulties.

8VAC20-21-610. School counselor preK-12.

A. The school counselor preK-12 program will ensure that the candidate has demonstrated the following competencies:

1. The ability to support students by cooperatively working with parents/guardians and teachers.
2. Understanding of the principles and theories of human growth and development throughout the lifespan and their implications for school guidance and counseling.

3. Understanding of the social and cultural foundations of education and their implications for school guidance and counseling programs.
4. Understanding of lifespan career development.
5. Understanding of the skills and processes for counseling students to include:
  - a. Individual and group counseling for academic development;
  - b. Individual and group counseling for career development; and
  - c. Individual and group counseling for personal/social development.
6. Understanding of the knowledge, skills, and processes for providing developmental group guidance, including:
  - a. Academic development;
  - b. Career development; and
  - c. Personal/social development.
7. Understanding of the skills and processes related to the school counseling program at the elementary, middle, and secondary levels, including:
  - a. Characteristics of learners at the elementary, middle, and secondary levels;
  - b. Program planning;
  - c. Coordination;
  - d. Consultation; and
  - e. Staffing patterns.
8. Understanding of the knowledge, skills, and processes of student appraisal and assessment relative to school guidance and counseling programs, including:
  - a. Individual assessment; and
  - b. Group assessment.
9. Understanding of the counseling professional, including:
  - a. Legal considerations;

b. Ethical considerations; and

c. Professional issues and standards.

10. Understanding of the skills and processes of research and evaluation aimed at improving school guidance and counseling programs.

B. Endorsement requirements.

1. Option I. The candidate must have:

a. An earned master's degree from an approved counselor education program which shall include at least 100 clock hours of clinical experiences in the preK-6 setting and 100 clock hours of clinical experiences in the grades 7-12 setting; and

b. Two years of successful, full-time teaching experience or two years of successful experience in guidance and counseling. Two years of successful, full-time experience in guidance and counseling under a provisional license may be accepted to meet this requirement.

2. Option II. The candidate must have:

a. An earned master's degree from an accredited college or university and certification from an approved counselor education program that the candidate has completed sufficient course work and clinical experience to acquire the competencies described herein; and

b. Two years of successful, full-time teaching experience or two years of successful, full-time experience in guidance and counseling. Two years of successful, full-time experience in guidance and counseling under a provisional license may be accepted to meet this requirement.

8VAC20-21-620. School psychology.

A. The school psychology program will ensure that the candidate has demonstrated the following competencies:

1. Knowledge, skills, and processes for assessing students' cognitive abilities, academic performance, interpersonal emotional/social functioning, and sensory-motor functioning.

2. Understanding of the knowledge, skills, and processes for direct and indirect intervention, including:

a. Counseling on an individual, group, or family basis;

b. Consulting with administrators, teachers, parents, and other professionals about student problems and appropriate change strategies; and

c. Designing and implementing behavior change programs.

3. Psychological foundations of human functioning (biological bases of behavior; cultural diversity; infant, child, and adolescent development; personality theory; human learning; and social bases of behavior) to ensure student academic achievement and student growth and development.

4. Educational foundations of schooling (education of exceptional learners, instructional and remedial techniques, and organization and operations of schools) to ensure effective collaboration with other school professionals.

5. Statistics and research design.

6. School psychology profession, including:

a. History and foundations of school psychology;

b. Legal and ethical issues;

c. Professional issues and standards; and

d. Role and function of the school psychologist.

B. Endorsement requirements.

1. Option I. The candidate must complete:

a. An approved program in school psychology;

b. Sixty graduate hours which culminate in at least a master's degree; and

c. An internship which is documented by the degree granting institution. No more than 12 hours of internship can be counted toward the 60 graduate semester hours required for licensure. The internship experience shall occur on a full-time basis over a period of one year or on a half-time basis over a period of two consecutive years. The internship shall occur under conditions of appropriate supervision, i.e., school-based supervisor shall hold a valid credential as a school psychologist and non-school based supervisor shall be an appropriately credentialed psychologist. The internship shall include experiences at multiple age levels, at least one half of which shall be in an accredited schooling setting.

2. Option II. The candidate must hold a certificate issued by the National School Psychology Certification Board.

8VAC20-21-630. School social worker.

A. The school social worker program will ensure that the candidate has demonstrated the following competencies:

1. Understanding of the knowledge, skills, and processes for direct and indirect intervention, including:
  - a. Counseling on an individual, group, or family basis;
  - b. Consulting with administrators, teachers, parents, and other professionals about student problems and appropriate change strategies; and
  - c. Networking with school programs and community agencies to provide essential services for families and children.
2. Understanding of child development, psychopathology, social and environmental conditioning, cultural diversity and family systems.
3. Understanding of the knowledge, skills, and processes for effective casework practice.
4. Understanding of the organization and operations of school systems.
5. Understanding of the knowledge, skills, and processes involved with assessing and programming for exceptional students.
6. Understanding of the school social work profession, including:
  - a. History and foundations of school psychology;
  - b. Legal and ethical issues;
  - c. Professional issues and standards; and
  - d. The role and function of the school social worker.

B. Endorsement requirements.

1. Option I. The candidate must have:
  - a. An earned master's of social work from an accredited school of social work with a minimum of 60 graduate semester hours;
  - b. A minimum of six graduate semester hours in education; and

c. Completed a supervised practicum or field experience of a minimum of 400 clock hours in an accredited school discharging the duties of a school social worker.

2. Option II. The candidate must have:

a. An earned master's of social work from an accredited school of social work with a minimum of 60 graduate semester hours;

b. A minimum of six graduate semester hours in education; and

c. One year of successful full-time supervised experience as a school social worker in an accredited school.

8VAC20-21-640. Visiting teacher.

A. The visiting teacher program will ensure that the candidate has demonstrated the following competencies:

1. Understanding of the knowledge, skills, and processes for organizing and delivering visiting teacher services in the schools.

2. Understanding of the knowledge, skills, and processes for effective casework practice.

3. Understanding of the foundations for delivery of visiting teacher services (community organization, group processes, family dynamics, abnormal psychology, human growth and development, assessment/evaluation, education of exceptionalities, and school law) to ensure student academic achievement and student growth and development.

B. Endorsement requirements. The candidate must have:

1. An earned master's degree from an accredited college or university;

2. Completed a minimum of 30 graduate hours which shall include a course in each of the following:

a. School social work practice;

b. Community organization;

c. Casework practice;

d. Group process;

e. Family dynamics;

f. Abnormal psychology;

g. Human growth and development (birth through adulthood);

h. Assessment/evaluation;

i. Education of exceptionalities; and

j. School law;

3. Completed one year of successful, full-time experience in an accredited educational setting either as a teacher or as a pupil personnel professional; and

4. Completed one year of full-time supervised experience as a visiting teacher in an accredited school.

8VAC20-21-650. Vocational evaluator.

A. The vocational evaluator program will ensure that the candidate has demonstrated the following competencies:

1. Understanding of the foundations of vocational evaluation and career assessment, including philosophy and process of vocational evaluation/assessment, use of occupational and labor market information, and functional aspects of disability.

2. Understanding of the basic concepts and skills of planning for and delivering vocational evaluation and career assessment services, including the use of vocational interviewing, individualized service planning, report development and communication, and use of modifications and accommodations.

3. Understanding of the content, processes, and skills necessary to administer and report findings of standardized testing, including knowledge of tests and measurements and selection and use of appropriate instruments.

4. Understanding and knowledge of specific assessment techniques and skills and the processes for conducting vocational evaluation and career assessment, including:

a. Job and training analysis;

b. Work samples and systems;

c. Situational and community-based assessment;

d. Behavioral observation; and

e. Learning and functional skills assessment.

B. Endorsement requirements.

1. Option I. The candidate must be certified as a Vocational Evaluation Specialist (CVE), meeting all standards and criteria of the Commission on Certification of Work Adjustment and Vocational Evaluation Specialist (CCWAVES).
2. Option II. The candidate must have a master's degree in vocational evaluation, vocational education, special education, or rehabilitation counseling and completed 15 graduate semester hours distributed in the following areas:
  - a. Tests and measurements: 3 semester hours;
  - b. Medical and educational aspects of disability: 3 semester hours;
  - c. Occupational information and job analysis: 3 semester hours;
  - d. Purposes/practices of vocational evaluation: 3 semester hours; and
  - e. Career/life planning/transition services: 3 semester hours.

Part VII

Revocation, Cancellation, Suspension, Denial and Reinstatement of Teaching Licenses

8VAC20-21-660. Revocation.

- A. A license issued by the Board of Education may be revoked for the following reasons:
1. Obtaining or attempting to obtain such license by fraudulent means or through misrepresentation of material facts;
  2. Falsification of school records, documents, statistics, or reports;
  3. Conviction of any felony;
  4. Conviction of any misdemeanor involving moral turpitude;
  5. Conduct, such as immorality, or personal condition detrimental to the health, welfare, discipline, or morale of students or to the best interest of the public schools of the Commonwealth of Virginia;
  6. Misapplication of or failure to account for school funds or other school properties with which the licensee has been entrusted; or
  7. Other good and just cause of a similar nature.

B. Procedures.

1. Submission of complaints. A complaint may be filed by anyone, but it shall be the duty of a division superintendent, principal or other responsible school employee to file a complaint in any case in which he has knowledge that a holder of a license is guilty of any offense set forth in subsection A of this section. The person making the complaint shall submit it in writing to the appropriate division superintendent.

2. Action by division superintendent; investigation. Upon receipt of the complaint against the holder of a license, a division superintendent or his duly authorized representative shall investigate the charge. If, on the basis of such investigation, the division superintendent finds the complaint to be without merit, he shall so notify the complaining party or parties in writing and then close his file on the matter. This action shall be final unless the local school board, on its own motion, votes to proceed to a hearing on the complaint or unless circumstances are present making subsection A of this section applicable.

C. Petition for revocation. Should the division superintendent or local school board conclude that there is reasonable cause to believe that a complaint against the holder of a license is well founded, the teacher shall be notified of the complaint by a written petition for revocation of a license signed by the division superintendent. A copy of such petition shall be sent by registered mail, return receipt requested, to the teacher's last known address. If not otherwise known, the last known address shall be the address shown in the records of the Department of Education.

D. Form of petition. The petition for the revocation of a license shall set forth:

1. The name and last known address of the person against whom the petition is being filed;
2. The social security number of and the type of license held by the person against whom the petition is being filed;
3. The offenses alleged and the specific actions which comprise the alleged offenses;
4. The name and address of the party filing the original complaint against the license holder;
5. A copy of the regulations containing a statement of the rights of the person charged under this chapter; and
6. Any other pertinent information.

E. Filing of petition. The original petition shall be entered in the files of the local school board where the license holder is employed.

F. Response to petition. The license holder shall present his written answer to the petition, if any, within 14 days after the date of service of the petition as certified by the United States Postal Service.

1. If the teacher responding to the petition states that he does not wish to contest the charges, he may voluntarily return the license to the division superintendent with a written, signed statement requesting cancellation. The Superintendent of Public Instruction is authorized, upon receipt of the license holder's written, signed request from the division superintendent, to cancel the license.
2. If the license holder files a written answer admitting the charges, or refuses to accept the copy of the petition from the postal authorities, or fails to file a written answer within 14 days after service of the petition or has failed to provide postal authorities with a forwarding address so that the petition can be delivered, the local school board shall proceed to a hearing as described in subdivisions 3 and 4 of this subsection.
3. If the license holder files his written answer denying the charges in the petition, the local school board shall provide a hearing at the time and place of its regular meeting or at such other reasonable time and place it may specify. The license holder or his representative, if any, shall be given at least 14 days notice of the hearing.
4. Following the hearing, the local school board shall receive the recommendation of the division superintendent and then either dismiss the charges or make such recommendations as it deems appropriate relative to revocation of a license. A decision to dismiss the charges shall be final, except as specified in subsection G of this section, and the investigative file on the charges shall be closed and destroyed or maintained as a separate sealed file under provision of the Code of Virginia. Any record or material relating to the charges in any other file shall be removed or destroyed. Should the local school board recommend the revocation or suspension of a license, this recommendation, along with the investigative file, shall promptly be forwarded by the division superintendent to the Superintendent of Public Instruction.

G. Revocation on motion of the Board of Education. The Board of Education reserves the right, in situations not covered by this chapter, to act directly in revoking a license. No such revocation will be ordered without the involved license holder being given the opportunity for the hearing specified in 8VAC20-21-710 B.

H. Reinstatement of license. A license that has been revoked may be reinstated by the Board of Education after five years if the board is satisfied that reinstatement is in the best interest of the former license holder and the public schools of the Commonwealth of Virginia. The individual must apply to the board for reinstatement. Notification to all appropriate parties will be communicated in writing by the state agency.

8VAC20-21-670. Cancellation.

A. A license may be canceled by voluntary return by the individual, or for reasons listed under 8VAC20-21-660 A or for the following reason:

The teacher in his answer to the petition, as described in 8VAC20-21-660 F 1, states that he does not wish to contest the charges. Reasons for cancellation are the same as those listed under 8VAC20-21-660 A.

B. Procedures. The individual may voluntarily return the license to the division superintendent with a written, signed statement requesting cancellation. The Superintendent of Public Instruction is authorized upon receipt of the license holder's written and signed request from the division superintendent to cancel the license. However, no such cancellation will be made without the involved license holder being given the opportunity for a hearing, as specified in 8VAC20-21-710 B.

C. Reinstatement of license. A license that has been returned for cancellation may be reissued using the normal procedure for application if the board is satisfied that reinstatement is in the best interest of the former license holder and the public schools of the Commonwealth of Virginia. The individual must apply to the board for reinstatement. Notification to all appropriate parties will be communicated in writing by the Department of Education.

8VAC20-21-680. Suspension.

A. A license may be suspended for the following reasons:

1. Physical, mental, or emotional incapacity as shown by a competent medical authority;
2. Incompetence or neglect of duty;
3. Failure or refusal to comply with school laws and regulations, including willful violation of contractual obligations; or
4. Other good and just cause of a similar nature.

B. Procedures.

1. Submission of complaints. A complaint may be filed by anyone, but it shall be the duty of a division superintendent, principal, or other responsible school employee to file a complaint in any case in which he has knowledge that a holder of a license is guilty of any offense set forth in subsection A of this section. The person making the complaint shall submit it in writing to the appropriate division superintendent.

2. Action by division superintendent; investigation. Upon receipt of the complaint against the holder of a license, a division superintendent or his duly authorized representative shall investigate the charge. If, on the basis of such investigation, the division superintendent finds the complaint to be without merit, he shall so notify the complaining

party or parties in writing and then close his file on the matter. This action shall be final unless the local school board on its own motion votes to proceed to a hearing on the complaint or unless circumstances are present making subdivision C of this section applicable.

C. Petition for suspension. Should the division superintendent or local school board conclude that there is reasonable cause to believe that a complaint against the holder of a license is well founded, the teacher shall be notified of the complaint by a written petition for suspension of a license signed by the division superintendent. A copy of such petition shall be sent by registered mail, return receipt requested, to the teacher's last known address. If not otherwise known, the last known address shall be the address shown in the records of the Department of Education.

D. Form of petition. The petition for the suspension of a license shall set forth:

1. The name and last known address of the person against whom the petition is being filed;
2. The social security number and the type of license held by the person against whom the petition is being filed;
3. The offenses alleged and the specific actions that comprise the alleged offenses;
4. The name and address of the party filing the original complaint against the license holder;
5. A statement of the rights of the person charged under this chapter; and,
6. Any other pertinent information.

E. Filing of petition. The original petition shall be entered in the files of the local school board where the license holder is employed.

F. Response to petition. The license holder shall present his written answer to the petition, if any, within 14 days after the date of service of the petition as certified by the United States Postal Service.

1. If the teacher responding to the petition states that he does not wish to contest the charges, he may voluntarily return his license to the division superintendent with a written and signed statement requesting suspension. The Superintendent of Public Instruction is authorized, upon receipt of the license holder's written, signed request from the division superintendent, to cancel the license.
2. If the license holder files a written answer admitting the charges, or refuses to accept the copy of the petition from the postal authorities, or fails to file a written answer within 14 days after service of the petition, or has failed to provide postal authorities with a

forwarding address so that the petition can be delivered, the local school board shall proceed to a hearing as described in subdivisions 3 and 4 of this subsection.

3. If the license holder files his written answer denying the charges in the petition, the local school board shall provide a hearing at the time and place of its regular meeting or at such other reasonable time and place it may specify. The license holder or his representative, if any, shall be given at least 14 days notice of the hearing.

4. Following its hearing, the local school board shall receive the recommendation of the division superintendent and then either dismiss the charges or make such recommendations relative to suspension of a license as it deems appropriate. A decision to dismiss the charges shall be final, except as specified in subsection G of this section, and the file on the charges shall be closed and all materials expunged. Should the local school board recommend the suspension of a license, this recommendation, along with supporting evidence, shall promptly be forwarded by the division superintendent to the Superintendent of Public Instruction.

G. Suspension on motion of Board of Education. The Board of Education reserves the right, in situations not covered by this chapter, to act directly in suspending a license. No such suspension will be ordered without the involved license holder being given the opportunity for the hearing as specified in 8VAC20-21-710 B.

H. Reinstatement of license. A license may be suspended for a period of time not to exceed five years. The license may be reinstated by the Department of Education, upon request, with verification that all requirements for license renewal have been satisfied. The individual must apply to the board for reinstatement. Notification to all appropriate parties will be communicated in writing by the Department of Education.

8VAC20-21-690. Denial.

A. A license may be denied for the following reasons:

1. Attempting to obtain such license by fraudulent means or through misrepresentation of material facts;
2. Falsification of records or documents;
3. Conviction of any felony;
4. Conviction of any misdemeanor involving moral turpitude;
5. Conduct, such as immorality, or personal condition detrimental to the health, welfare, discipline, or morale of students or to the best interest of the public schools of the Commonwealth of Virginia;
6. Revocation of the license by another state; or

7. Other good and just cause of a similar nature.

B. Expired license. The holder of a license that has expired may be denied renewal or reinstatement by the Superintendent of Public Instruction for any of the reasons specified in 8VAC20-21-660 A. No such denial will be ordered unless the license holder is given the opportunity for the hearing specified in 8VAC20-21-710 B.

8VAC20-21-700. Right to counsel and transcript.

A license holder shall have the right, at his own expense, to be represented by counsel of choice at the local school board hearing provided for in 8VAC20-21-660 F or in the proceedings before the Board of Education, as specified in 8VAC20-21-710 A and B. Counsel may, but need not, be an attorney. Any such hearing before a local school board and any hearing before the Board of Education shall be recorded; and, upon written request, the party charged shall be provided a hearing transcript without charge.

8VAC20-21-710. Action by the State Superintendent of Public Instruction and the Board of Education.

A. Upon receipt of the complaint from the local school division, the Superintendent of Public Instruction will ensure that an investigative panel at the state level reviews the petition. The panel shall consist of three to five members selected by the Division Chief, Compliance Coordination, of the Virginia Department of Education. The license holder should be notified within 14 days of the receipt of the complaint to the Department of Education as to the date, time, and location of the hearing. Both parties, the local school division and the license holder, are entitled to be present with counsel if so desired. The recommendation of the state-level panel is made to the State Superintendent of Public Instruction for presentation to the State Board of Education. The superintendent shall then present his report to the Board of Education or its duly designated committee at one of its duly scheduled meetings. The license holder shall be given at least 14 days notice (in the manner specified in 8VAC20-21-660 F) of the date on which the Superintendent of Public Instruction's report will be continued, where necessary, from one meeting of the Board of Education or committee to another.

B. Hearing. The Board of Education, or its duly designated committee, shall receive and consider the report of the Superintendent of Public Instruction and such relevant and material evidence as the license holder may desire to present at the hearing. At the conclusion of the hearing, the Superintendent of Public Instruction may recommend the action --revocation or suspension --that should be taken by the Board of Education. The Board of Education will then enter its order within 14 days after the hearing has concluded. This order will contain findings of fact either sustaining or dismissing the complaint.

C. Decision not to revoke or suspend. If the decision of the Board of Education is not to revoke or suspend the license, the license holder and the principal complainants will be

so notified and the Board of Education's file and any other record or material will be removed or destroyed.

D. Decision to revoke or suspend. If the decision of the Board of Education is to revoke or suspend the license, a written order will be entered in the minutes of the meeting at which the matter was decided. A copy of this order will be sent to the license holder and the principal complainants.

8VAC20-21-720. Right of license holder to appear at hearing.

A license holder shall have the right to appear in person at the hearings held by the local school board, Board of Education, or board committee described in this part unless he is confined to jail or a penal institution. The local school board or Board of Education, at its discretion, may continue such hearings for a reasonable time if the license holder is prevented from appearing in person for reasons such as documented medical or mental impairment.

8VAC20-21-730. Notification.

Notification of the revocation, denial, or reinstatement of a license shall be made by the Superintendent of Public Instruction, or his designee, to division superintendents in Virginia and to chief state school officers of the other states and territories of the United States.